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SUPPLEMENT

TO THE

WORKS

OF

JOHN HUTCHINSON, Esq;

BEING

An INDEX and EXPLANATION of all the HEBREW WORDS cited in the Second Part of his MOSES's PRINCIPIA.

WITH

ADDITIONAL REMARKS,

By the late Learned

ROBERT SPEARMAN, Esq;

Author of *An Enquiry after Philosophy and Theology*, and of *Letters on the* LXX.

To this Work is prefixed,

Mr. HUTCHINSON's LIFE,

Written by Mr. SPEARMAN.

LONDON:

Printed for W. FADEN, near Shoe-Lane, Fleet-Street, and J. WILKIE in St. Paul's Church Yard.

MDCCLXV.

Price Sewed, 3s. 6d. Bound, 4s.

DEC 3 1935
Theological Seminary

ADVERTISEMENT

TO THE

READER.

THE following Index and Explanation of Hebrew Words, *&c. was found among the Papers of the late truly learned and worthy Mr.* Spearman, *in a Manuſcript all written with his own Hand, and as appears by a Note at the Beginning of it, originally deſigned for Publication. The Editor, to whom it was communicated by a Gentleman who had Mr.* Spearman's *Papers left to him by Will, thought it too curious and uſeful a Performance to be kept any longer private, and can do no leſs than recommend it as a* good Illuſtration of the moſt difficult Part of Mr. *Hutchinſon*'s Writings: *Though, at the ſame time, he does not think himſelf bound to embrace and defend every thing here advanced, either by Mr.* Hutchinſon *or Mr.* Spearman, *and, in Juſtice to the Memory of the latter, muſt obſerve, that the Reader will find the* Motion of the

the Earth *more fully and satisfactorily explained, in his* Enquiry after Philosophy and Theology, *Ch. 2d and 4th, than it is here.*

The larger Figures in the Margin refer to the Pages of Mr. Hutchinson's *Moses* Principia, *Part 2d, printed by* Bettenham *in* 1727, *to which the Editor has added in Parentheses, the correspondent Pages of the 3d Edition, printed for* Hodges *in* 1748.

J. P.

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THE

LIFE

OF

JOHN HUTCHINSON, Esq;

Written by Mr. SPEARMAN.

JOHN HUTCHINSON, an Author, whose writings have made no inconsiderable noise in the learned world, was born at *Spennythorn*, a small village, about a mile distant from *Midlam* in *Yorkshire*, *A. D.* 1674. His father, Mr. *J. Hutchinson*, was possessed of a little estate of 40*l. per annum*, and determined to qualify his son for a Steward to some gentleman or nobleman. He had given him such school learning as the place afforded; and whilst he was considering whither to send him, in order for his further qualification, a gentleman happened to come into the neighbourhood, and wanting to board in some reputable family, was recommended to Mr. *Hutchinson* the father, who told him he should be welcome to his house, till such time as he could provide himself a place to his mind. As he found his guest to be both a sensible person, and a man of learning, he communicated to him his intentions concerning his son; and the gentleman who had taken a liking to the youth, agreed to instruct him in every branch of learning proper for the employment for which he was designed, upon condition the father would entertain him in his house, whilst he should think proper to stay in those parts, which he engaged himself not to leave until such time as he had compleated his son's education. The father chearfully agreed to the conditions,

and his gueſt faithfully diſcharged them on his part, not only inſtructing him in ſuch parts of the mathematics, as were more immediately connected with his deſtined employment, but in every uſeful branch of that noble ſcience, and at the ſame time furniſhed him with a competent knowledge of the celebrated writings of antiquity, and a fund of learning, which equally ſhewed the extenſive erudition of the maſter, and the comprehenſive genius of the ſcholar. Who this perſon was to whom our author was indebted for his education is not known, not ſo much as even his real name, as far as we can learn. He induſtriouſly concealed every circumſtance relating to himſelf, and ſo effectually, that Mr. *Hutchinſon* himſelf, the father, tho' a very ſhrewd perſon, could never by any means make the diſcovery. But whoever, or whatever he was, he taught our author, as himſelf ſays, as much as he could ſee there was any uſe for either upon the earth, or in the heaven, without poiſoning him with any falſe notions fathered upon the Mathematics.

About the age of 19, *A. D.* 1693, our Author went to be Steward to Mr. *Bathurſt* of *Skutterſkelf* in *Yorkſhire*, and from thence to the Earl of *Scarborough*, who would gladly have engaged him in his ſervice, but his ambition to ſerve the Duke of *Somerſet* would not ſuffer him to continue there; and he frankly acquainted his Lordſhip with his intentions, and that he could ſtay with him no longer than a vacancy ſhould happen in the Duke's houſhold. It was not long before this fell out; and our young Steward ſoon diſtinguiſhed himſelf in ſuch a manner, as to gain the chief Stewardſhip, and the favour of that nobleman, who honoured him with greater marks of eſteem and condeſcenſion, than he ever was known to ſhew to perſons of his condition.

About the year 1700, Mr. *Hutchinſon* was called to *London* to manage a law ſuit of conſiderable conſequence, between his Grace of *Somerſet*, and the old Lord *Wharton*; which he ſolicited ſo effectually, that it was concluded greatly to the ſatisfaction and advantage of the Duke. During his attendance in town, he had an opportunity of gaining a proper knowledge of the world, and what was doing in it: And it was about this time he contracted an acquaintance and intimacy with the late Dr. *Woodward*, who was Phyſician to the Duke his maſter.

Between

Between 1702 and 1706, his buſineſs carried him into ſeveral parts of *England* and *Wales*, where he made many uſeful obſervations, which he publiſhed in a little pamphlet, entitled, *Obſervations made by* J. H. *moſtly in the year* 1706. This is written in the moſt methodical manner of any of his works, and has very uſeful marginal annotations, which were made by Dr. *Woodward*.

Whilſt he travelled from place to place, he employed himſelf in making that large and noble collection of Foſſils, &c. which Dr. *Woodward* bequeathed to the Univerſity of *Cambridge*. The Doctor had no notion of Mr. *Hutchinſon*'s ability, in any other way than that of a Steward and a mineraliſt. Dr. *Woodward* conſulted him about his private affairs (for he was not the beſt œconomiſt.) *Woodward* aſked him to buy a coach horſe for him, and ſometimes honoured him ſo far as to preſide at a conſultation when his horſes chanced to be out of order, which Mr. *Hutchinſon* hath often with a great deal of humour, ridiculed to his intimates; for no one had more mother wit when he choſe to exert it.

The Doctor uſed to correſpond with Mr. *Hutchinſon*, whilſt he was abroad: In ſome of his letters, he wiſhes his horſe might throw him now and then, leſt he ſhould make too much haſte, and leave any anxious foſſil behind him. In others he deſires him to digeſt the foſſils into claſſes, and to put in papers between each claſs or ſpecies, deſcribing and aſcertaining the claſs or ſpecies of each, before he packed them up, and ſent them; and complains, that for want of this method, and the foſſils being all jumbled together, without any ſuch order, he was at a loſs to diſtinguiſh one ſpecies from another, and unable to ſort and place them in their proper claſſes in the catalogue. In one of his letters he tells him, that though a man poſſeſſed of mineral knowledge was every thing to him, yet this was not the caſe with others, and therefore, adviſes him not to ſet himſelf up above his ſuperiors, and to talk of matters above his ſphere; it ſeems he had then begun to throw out hints in converſation, againſt the Gravitarian ſyſtem, which he ridicules in one of his pieces, with an humour not inferior to *Lucian*. And in all his letters, the Doctor treats Mr. *Hutchinſon* in a very ſupercilious manner, and as a quite different perſon from what he afterwards found him to be.

The Natural Hiſtory of the Earth, which the Doctor had publiſhed before he and Mr *Hutchinſon* became acquainted, ſeems to have prejudiced our Author ſo much in his favour; and his collection of foſſils was deſigned as materials for a work to prove the truth of the *Moſaic* account of the firſt formation of the earth at the creation; the reformation after the Deluge, and of the Deluge, to ocular demonſtration. This the Doctor engaged to draw up, but ſeems never to have had any real intention of doing, only deſigning to make this a pretence to engage Mr. *Hutchinſon* more earneſtly in collecting mineral materials, and at the laſt of getting the whole collection into his poſſeſſion. And the event juſtifies the ſuſpicion. It does not appear that Mr. *Hutchinſon* had any thoughts at that time of commencing author. His natural reſearches had afforded him an opportunity of diſcovering what were the real agents in nature, and that the ſcripture Philoſophy was the only true Philoſophy; and he was deſirous his fellow creatures ſhould reap the benefit of his diſcoveries, and be ſet right in a point of that conſequence. And to this end, he choſe to make uſe of the pen of one who had already given an approved ſpecimen of his abilities in that way. But when he found that the Doctor was playing faſt and looſe with him, he was then reſolved to wait no longer, but truſt to his own pen, and exert that capacity, and thoſe talents in the ſervice of his heavenly Lord and Maſter, for which he had ſo eminently and ſucceſsfully diſtinguiſhed himſelf in the ſervice of his earthly Lord and Maſter. Tho' he had great and daily reaſons to ſuſpect the ſincerity of Dr. *Woodward*'s intentions, yet he was unwilling for a long while, to give too much way to his ſuſpicions; yet they put him upon his guard, and made him more and more earneſt in his ſolicitations, for the performance of the Doctor's promiſe. The Doctor thus preſt, in order to gain time, and quiet his clamours, was wont to ſhew him a large folio book, placed upon an upper ſhelf in his Study, in which he told him the deſired work was begun, and was in ſome forwardneſs; but he did not care to ſhew it him till it was completed, or at leaſt till he had reviſed what he had already wrote. This for the preſent ſilenced Mr. *Hutchinſon*'s ſolicitations, but not his ſuſpicions; and he was determined to try if he could not ſome way or other get a peep into this ſame folio. To this purpoſe he uſed to viſit

the

the Doctor at those hours in which it was most likely to find him in his study. The Doctor conscious of his own, or jealous of Mr. *Hutchinson*'s intentions, betrayed an uneasiness at these ill-timed visits, kept a watchful eye upon Mr. *Hutchinson*, and was always wanting to get him out of his study. This served only to increase Mr. *Hutchinson*'s suspicions, and his eagerness to make the wished for discovery; but the extreme caution of the Doctor for some time baffled all his endeavours. At the last

Quod optanti divum promittere nemo
Auderet, volvenda dies en attalit ultro.

For one day whilst the Doctor and Mr. *Hutchinson* were together in the Study, a servant came hastily in with a message, upon which the Doctor went out in a hurry, and inadvertently left Mr. *Hutchinson* alone, who did not slip the opportunity, but immediately seized and opened the book, found only a few heads of Chapters, and such like, scattered up and down, which like *Æneas*'s drowned Mariners, *apparent rari nantes in gurgite vasto*. This disappointment, tho' not quite unexpected, put our Author upon doing himself what he had in vain hoped for from others. And that he might be more at leisure to prosecute his studies, he begged leave of the Duke of *Somerset* to quit his service. The request at first piqued the pride of that nobleman, but when he was made to understand by Mr. *Hutchinson*, that he did not intend to serve any other master, and was told what were the real motives of his request, the Duke not only granted his suit, but made him his riding purveyor, (being at that time as we think, Master of the Horse to K. *George* I.) which place he enjoyed to the day of his death. As there is a good house in the little Meuse belonging to the Office of Purveyor, a fixed salary of 200*l*. *per annum*, and the place a kind of sine-cure, Mr. *Hutchinson*'s situation and circumstances were quite agreeable to his mind, and he gave himself up entirely to a studious and sedentary life, which being so opposite to his former way of doing, by degrees weakened and broke his constitution, and at length laid the foundation of that disorder which carried him off. The Duke also gave him the presentation of the living of *Sutton* in *Sussex*, near his seat at *Petworth*, to which Mr. *Hutchinson* presented the Rev. Mr. *Julius Bate*, a gentleman well known to the learned world.

In

In the year 1724, our Author publiſhed his *Moſes's Principia*, part I. in which he ridiculed Dr. *Woodward's Natural Hiſtory of the Earth*, and his account of the ſettlement of the ſeveral ſtrata, ſhells, and nodules by the laws of gravity, which he tells him, every dirty impertinent collier could contradict and diſprove by ocular demonſtration. He alſo threw out ſome hints concerning what had paſſed between the Doctor and himſelf, and the Doctor's deſign of robbing him of his collection of foſſils. There is ſo much humour runs thro' this piece, and another of his, called *A new account of the confuſion of Tongues*, that it hath often been wondered that theſe two were not more taken notice of, merely for that vein of witty irony which they contain.

From this time to his death, he continued publiſhing a volume every year, or every other year, which with the manuſcripts left behind, were publiſhed 1748, in twelve volumes octavo. An *Abſtract* of his works was alſo publiſhed 1753.

Dr. *Woodward* did not take any notice of our Author's piece, as thinking himſelf ſecure, and proof againſt the attacks of a writer of ſo little note as Mr. *Hutchinſon*. And he knew himſelf to be ſafe whilſt gravity ſtood its ground, which from the number and intereſt of its allies, he thought was in no danger of being knocked on the head, as was the champion of the *Philiſtines* by a naked youth with a nodule. He therefore reſolved to abide by gravity and his firſt performance, and refuſed either to draw up and publiſh the obſervations which by agreement he had engaged to do; or to return the collection of foſſils. Upon this Mr. *Hutchinſon* had recourſe to Law, and a Bill in Chancery was accordingly drawn, but whether filed we are not certain. The Doctor in the mean time made his will, whereby he left the Collection to the Univerſity of *Cambridge*, of which the Duke of *Somerſet* was Chancellor, and this perhaps might prevent Mr. *Hutchinſon* from carrying matters to extremities. However the Doctor's death, which happened in 1728, put an entire ſtop to all proceedings of that kind, and our Author, as himſelf complains in one of his Books, was bereft in a manner not to be mentioned, of thoſe obſervations, and thoſe collections, and even of the credit of being the collector, and both are now loſt for want of being reduced into order,

der, and applied, and the papers which ſtill remained in his hands relating to theſe ſubjects were rendered uſeleſs. Though a work to prove the truth of the Deluge and reformation of the earth, as recorded by *Moſes* from the exuviæ of animals, vegetables, and other things preſerved or found every where in the bowels, as well as near the ſurface of the earth, might have been of great ſervice, and perhaps the means to convince thoſe whom no other evidence would convince; yet his literary acquaintance look upon the breach between Dr. *Woodward* and him as a very happy event; becauſe had the Doctor fulfilled his engagements, Mr. *Hutchinſon* might have ſtopped there, and not have extended his reſearches to the lengths he has done, and thereby deprived the world of writings which they deem invaluable. The former friends of Mr. *Hutchinſon*, who were well acquainted with the intereſt he had with the Duke, his capacity for buſineſs, and the opportunities which were in his power of making the moſt of his talents, were greatly ſurpriſed at his quitting ſo many advantages of acquiring a large fortune, not only by leaving his old place, but neglecting to make the moſt of his new one; and an old crony of his meeting with him one day, very warmly remonſtrated with him upon the occaſion; to whom Mr. *Hutchinſon* made this reply, "Sir, I know the "value of money as well as you, and how far it will carry "one: thus far, and no farther. I therefore want ſome-"thing that will carry me beyond this line, this utmoſt "bound of money: and I truſt I have now choſen that "which will." His friend gave him no anſwer, but dropped his hand, which till then he had held in his own, and like the lawyer in the goſpel, went away grievouſly diſſatisfied.

In 1727, our Author publiſhed the *ſecond* part of *Moſes*'s *Principia*, *which contains the ſum and ſubſtance of the principles of the Scripture Philoſophy*; and which with the firſt part, is the only Philoſophical tract he publiſhed in his life-time.

As Sir *Iſaac Newton* made a *vacuum* and *gravity* the principles of his Philoſophy, our Author on the contrary aſſerts, that a *Plenum* and the *Air* are the principles of the Scripture Philoſophy. The *Air* he ſuppoſes to exiſt in *three* conditions, *fire*, *light*, and *ſpirit*. The *light* and *ſpirit* are the finer and groſſer parts of the air in motion:

From

From the Earth to the Sun the air is finer and finer till it becomes pure light near the confines of the Sun, and fire in the orb of the Sun, or ſolar focus. From the Earth towards the circumference of this ſyſtem, in which he includes the fixed Stars, the Air becomes groſſer and groſſer until it becomes torpid and ſtagnate, in which condition it is at the utmoſt verge of this ſyſtem; from whence the idea or expreſſion of *outer darkneſs*, and *blackneſs of darkneſs*, uſed in the New Teſtament ſeems to be taken. The Sun which he places in the center is the active vivifying agent, which by melting the ſpirit or groſſer parts of the air into atoms, or finer parts, or æther, and iſſuing them out in light, ſets the machine forward, and keeps it a going: for the light is preſſed out by the influx of ſpirit, and the ſpirit is preſſed in by the influx of light; and ſo the whole matter of the heavens or air is perpetually changing conditions, and circulating.

This doctrine of light and ſpirit is in the main ſo like what Sir *Iſaac Newton* ſays in his Queries of his *Ætherial Medium*, that grows denſer and denſer from the Sun to Saturn, and beyond (which he makes the *cauſe of gravity* and *motion*, and which is as contradictory to a vacuum and the vis inertiæ, as Mr. *Hutchinſon*'s light and ſpirit can be) that our Author's account might at leaſt lay claim to the ſame indulgence with Sir *Iſaac*'s of paſſing for philoſophical queſtions worthy of further examination. Sir *Iſaac Newton* informs us, that he builds his Philoſophy upon appearances: Now if theſe be a ſufficient ground work for ſuch a ſuperſtructure, Mr. *Hutchinſon* had infinitely more and better opportunities of judging by appearances than the other. His converſe and frequent buſineſs under ground, afforded him a ſeries of opportunities, as himſelf tells us, of making obſervations on the ſeveral various actions of the Air, in its three conditions of Fire, Light, and Spirit; of remarking what theſe agents have done in the reformation of the earth after the deluge, and what they do in the ſettled courſe of nature; and of conſidering the diſpoſition and ſituation of the parts of the earth, and of the ſeveral ſpecies of things in it; of making obſervations and experiments on the operations of fire, and its effects upon, and with various ſubſtances; of making obſervations upon light and ſpirit in all the various conditions and ſituations, or places where they happen naturally to be;

and

and of remarking the various effects they have upon various subjects; of making observations upon water, in all the situations, motions, and courses it took at the reformation of the earth, and since naturally has taken or takes; and by these means of coming at the knowledge of what things were AGENTS, and the manner of their agency; which were PATIENTS, and the manner in which they were acted upon; which were CAUSES, which EFFECTS. This method of judging from appearances, in such a course of experiments, must be acknowledged to be far superior to any of those upon which Sir *Isaac Newton* built his Gravitation System, and his doctrine of light and colours. In the one case, the appearances were those of nature, made and exhibited by herself; in the other, many of them were such as can, or do scarce ever happen in nature. The swinging of a pendulum, (the Palladium of Gravity) has not perhaps a parallel case in nature. The extracting or seperating the light from the spirit, by a prism, or refracting the light by bubbles, have not a parallel case, except it be in the rainbow, and such like. The experiments made with the load-stone, talc, or amber, arise from the texture of these bodies, which is different from that of most other bodies, and the bodies of themselves are only found in masses of small sizes. The other experiments of the effects produced by spirit or light, upon mixing small parcels of extracted fluids or substances, are such as scarce one of them every happened, or will happen in nature. Justice, to the person whose life we are writing, obliges us to make this remark, which we hope can give no just cause of offence to any one.

In the introduction to the second part of *Moses*'s *Principia*, mentioned above, Mr. *Hutchinson* hinted that the idea of the *Trinity* was to be taken from the *three* grand agents in the system of nature, *Fire*, *Light* and *Spirit*, which are *three conditions of one and the same substance*, and wonderfully answer in a typical or symbolical manner to the three persons of one and the same essence. This struck the late celebrated Dr. *Samuel Clarke* so forcibly, that he sent a gentleman to Mr. *Hutchinson*, with compliments upon the performance, but that there was one proposition which he hoped was not true, and desired a conference with him about it. Mr. *Hutchinson* sent him word by the gentleman, that the book had been a work of much

labour and time, and when he had considered it longer, it would be soon enough then to talk of a conference. The Doctor sent again that he understood the substance of the book, but only wanted to confer about that proposition. Mr. *Hutchinson* sent for answer, that he intended shortly to explain that hint, and prove it fully. The Doctor not satisfied with this, still continued his solicitations for a conference, which Mr. *Hutchinson* as constantly refused; but let him know, that if he pleased to write any thing against that proposition, he would soon convince him of it, and withal, that he had been too forward in writing upon subjects which he had not duly considered. Dr *Clarke* died *May* 17, 1729.

Some time in the year 1712, Mr. *Hutchinson* compleated a machine of the watch kind, for the discovery of the Longitude at Sea. It was referred to Sir *Isaac Newton*, and other persons qualified, to consider and examine pretensions of that kind, and was by them approved; and Mr. *Hutchinson* even obtained testimonials under their hands, of the perfection and usefulness of his machine. But when application was to be made to parliament, he was some way or other dropped by those who had promised to support his pretensions: Nettled with the disappointment, he seems to have laid aside this, and several other things of that sort, and to have destroyed all his papers concerning them. Two of these watches were found after his decease, the one put together, the other not, but no papers or notes relative to them were to be met with, any more than the manuscript map of the world, which the late Mr. *Whiston* in his *Longitude* and *Latitude*, mentions in these words; "I have also very lately been shewn by Mr. "*Hutchinson*, a very curious and inquisitive person, a copy "of a manuscript Map of the World, made about eighty "years ago, taken by himself from the original, wherein "the variation is reduced to a theory, much like that "which Dr. *Halley* has since proposed, and in general exactly agreeing to his observations.—But with this advantage, that therein the northern pole of the internal "loadstone is much better stated than it is by Dr. *Halley*. "—Its place then being, according to this unknown very "curious and sagacious author, about the meridian, &c. "which antient, and authentic determination of its "place, I desire my reader particularly to observe."

This

This method of discovering the Longitude, proposed by Mr. *Hutchinson*, is allowed by the best judges to be the easiest to understand and practise of all others; requiring no depth of astronomy, no nicety in observations and calculations, and so is even to the common sailors the most practicable. For if a watch could be exactly kept to an even motion, and so shew the hour at any one certain place at land, a comparison of the time known by that watch, with the apparent time at the ship, known by the sun or stars, or another watch regulated by them, would discover the Longitude from the place to which that first watch was adjudged in time, and by allowing 15 degrees of the equator to an hour, may be found in degrees also. And Mr. *Hutchinson* had so contrived, and framed the springs, wheels, and pevets, &c. of his watches, as not in any considerable degree to be influenced by heat, cold, moisture and drought, and also to be capable of that degree of exactness, which is requisite to answer the purpose. And it is the opinion of those who know most of this affair, that a machine of the watch kind, bids the fairest of any method for the discovery of the Longitude.

Mr. *Hutchinson* had been accustomed every year to take a month's refreshment or so in the country, near London, but the year he died, he denied himself this benefit, and sat close at his studies, during the sultry months of *June* and *July*, in order to prepare *the second part of the data of christianity* for the press against the winter; and had even neglected his constant exercise of riding in *Hyde-park*. But at length one day mounting his horse, the beast pampered by the mistaken kindness of his keeper, and not having been ridden for some time by his master, was so fretful and unruly, that Mr. *Hutchinson* had some difficulty to keep his seat, which however he did, but the irregular sallies of the horse, and the sudden jerks given to his body by them, occasioned an overflowing of the gall, which confined him to his bed, and put a period to his life in about 16 days time. Upon the Saturday after the accident, Mr. *Fraser*, of St. *Martin*'s-*Lane*, who was his apothecary, advised him to send for Dr. *Mead*; but unluckily the Doctor was gone to *Windsor*, however his son-in-law (Sir *Edward Wilmot*, Bart.) came immediately, and prescribed bleeding, but Mr. *Hutchinson*, contrary to the earnest solicitations of the friends he had then with him, chose to defer it till he

ſhould ſee Dr. *Mead*. On the Monday following, the Doctor waited upon Mr. *Hutchinſon*, blamed him for not being bled, but told him he would ſoon ſend him to *Moſes*; (meaning to his ſtudies, two of his books being entitled *Moſes*'s *Principia*) to which Mr. *Hutchinſon* taking it in the other ſenſe, anſwered in a muttering tone, for his voice was affected by his illneſs, *I believe Doctor you will*. In a day or two after this, he ſeemed to be in a fair way of recovery, and was able to converſe about his literary affairs, with his favourite, Mr. *Julius Bate*, who upon being made acquainted with Mr. *Hutchinſon*'s illneſs, came with all haſte from his living in *Suſſex*, to attend him. But this bright gleam was of ſhort continuance, for an intimate friend of his who lived at a little diſtance from *London*, coming to town in the middle of the week following to ſee him, found him in a very weak and dangerous way, ſitting in the room, which he made his ſtudy, and ſeeming as if he had been buſy among his papers. He had ſent Mr. *Bate* out. and was alone. He told this gentleman, Dr. *Mead* had uſed him ill; that he had forbid his atttendance, and called in another phyſician, (Dr. *Pellet* we think) he much wiſhed he could live to give more evidence, but there is enough, ſays he, to a literary friend, raiſing his voice, if you and the reſt of you be not deficient on your parts. He recommended Mr. *Julius Bate* to this gentleman's friendſhip, with a ſtrict charge not to ſuffer his labours to become uſeleſs by their neglect. When he left Mr. *Hutchinſon*, which was at the door of his bedchamber, to which he had prevailed upon him to retire, Mr. *Hutchinſon* taking his hand ſaid, *Farewell, you will ſee me no more*.

On the Sunday following, *Auguſt* 28, 1737, in the morning, he departed this life, aged 63. Thus died this memorable perſon, unnoticed even in the news-papers, except by an information to the public, that the place was become vacant by his death. To borrow the words of an old acquaintance of his, "Without conſidering him as an Author, "few perſons deſerved better of mankind than he did. "If ſuperior talents for buſineſs, and indefatigable earneſtneſs in proſecuting it,—If the niceſt addreſs, joined "with the ſtricteſt probity, of which he gave many ſhining "inſtances, in conducting the ſuit between the Duke his "maſter, and the old Lord *Wharton*,—If theſe be qualifi-

"cation

" cations which merit any regard, few had a larger ſhare " of them than Mr. *Hutchinſon*. If the collection of foſſils " left by Dr. *Woodward* to the Univerſity of *Cambridge* " be of any value, of any ſervice, or deſerve the notice of " that learned body, let them remember, that they owe " the whole to the abilities and induſtry of Mr. *Hutchin-* " *ſon*. And perhaps had a due regard been paid to his ma- " chine, mentioned above, the world would alſo have " been indebted to him for the diſcovery of the Longitude.

" *Fas ſit ut hos ſpargam flores, animamque Sepulti*
" *Iris ſabtam accumulem donis, et fungar inani*
" *Munere.*" ———

A report has lately been induſtriouſly propagated, that Mr. *Hutchinſon* recanted the publication of his writings to the late Dr. *Mead* a little before his death. How improbable ſuch a report ſeems to be, appears from what has been related above, of the conference which one of his friends had with him, not four days before he died, and ſome days after the Doctor had been diſmiſſed by him as a phyſician. Mr. *Hutchinſon* would never have been ſo ſolicitous about the publication of the papers left behind him, had he, as this report would inſinuate, repented of thoſe already publiſhed in his life-time. This perſon is living, and ready to teſtify the truth of what is here related. The following letter, written by the Reverend Mr. *Julius Bate*, to a friend, with his leave to publiſh it, may ſerve as a refutation of this report.

" *Dear Sir*,

" I am greatly ſurpriſed at a ſtory a Lady it ſeems pro- " pagates at *Epſom*, that Mr. *Rowe* told her, that Dr. *Mead* " told him, that Mr. *Hutchinſon* apprehended his writings " would do miſchief, and that upon his death-bed he re- " canted the publication of them. The Doctor is dead, " but Mr. *Rowe*, I hope living, and by what I could judge " when I had the pleaſure of being introduced to him by " you, a man of great worth and merit, and if he will " juſtify the Lady's ſtory, it muſt then lie upon the de- " ceaſed Dr. *Mead*; to whom, I am firmly convinced, as I " can be of any negative, that no ſuch words were ſpoken " by Mr. *Hutchinſon*, or any thing tending that way. I " was with Mr. *Hutchinſon*, all the illneſs that rob- " bed us of that invaluable life, and am poſitive Dr.

" *Mead*

" *Mead* was never with him, but when I was by, and it " was but a few hours day or night that I was from him. " Mr. *Hutchinſon* had not been long ill, when he took a " diſguſt to Dr. *Mead*, and forbad his farther attendance, " which the Doctor much wondered at, and ſeemed " greatly to reſent. *Lucas*, myſelf, and ſomebody elſe, " I forget who, were ſtanding by the bed-ſide one day, " when Dr. *Mead* came in, and I believe it was the laſt " time he was up ſtairs. Mr. *Hutchinſon*, ſays the " Doctor, among other things, *I cannot help looking upon* " *you as one of the old Prophets, with his Diſciples ſtanding* " *about him with concern and attention in their faces, catch-* " *ing up the golden words as they drop*, or to that effect.— " Doctor, ſays Mr. *Hutchinſon*, *If I am a Prophet, what* " *are you? I have given you ſuch evidence,—look to it before* " *it is too late.* I well remember the compliment above, " and it is hardly to be ſuppoſed, that Dr. *Mead* meant to " call him a falſe prophet, who no doubt believed in the " prophets, and would not make ſo bad a compliment to " his patient, as calling him a falſe one; nor did Mr. " *Hutchinſon* acknowledge himſelf a falſe one, as now " is ſaid. I am very poſitive as to the purport of the " words above, and the ſilence it ſtruck the Doctor into. " His ſentiments and Mr. *Hutchinſon*'s in religion were " widely different, but I cannot think that the Doctor " could out of reſentment, or any other motive, fling out " ſuch a ſtory, and therefore much queſtion the Lady's " having Mr. *Rowe*'s authority; whom I ſhould believe " that Doctor *Mead* told him ſo, if he ſays it. But that " Mr. *Hutchinſon* ever ſaid any ſuch thing to the Doctor, " I as firmly diſbelieve, and know to be falſe, as any " negative of that nature can be known to be ſo. " You may ſhew this to whom you pleaſe, and I think " the above confutes the ſtory, for the Doctor would " hardly have complimented Mr. *Hutchinſon* with being a " Prophet, had he acknowledged himſelf a Deceiver.

I am, &c.

Arundel, Jan. 20, 1759. JULIUS BATE.

The

The Works of Mr. HUTCHINSON *are as follow:*

Vol. I. *Moses's Principia*, Part I. containing an account of the diſſolution and reformation of the Earth, with an Eſſay to ſhew, that the Air was the rival ſet up againſt God, and that a great part of the Bible was to ſet men right in that point.

Vol. II. *Moses's Principia*, Part II. being an account of the natural Agents which perform the Operations of Nature, viz The Air; or Fire, Light, and Spirit.

Vol. III. *Moses's ſine Principia*, or the meaning of the names and titles of God, with an introduction to ſhew the Nature of the Fall, of Paradiſe, and of the Body and Soul.

Vol. IV. *The confuſion of Tongues, and Trinity of the Gentiles*; being an account of the Origin of Idolatry, Confuſion of Languages, and thereby loſs of Natural Philoſophy in the Heathen world, which is preſerved in the Bible.

Vol. V. *Power eſſential and mechanical*; or what power belongs to God, and what to his creatures, in which the deſign of Sir *Iſaac Newton*, and Dr. *Samuel Clarke* is laid open.

Vol. VI. *Glory or Gravity*, or Glory eſſential; and the Cherubim explained.

Vol. VII. *The Hebrew writings perfect*; being a detection of the forgeries of the Jews, and an Explanation of the various ways in which it pleaſed God to exhibit himſelf and the Covenant of Grace to Men.

Vol. VIII. Containing *The Religion of Satan*, or Natural Religion; and the data in Chriſtianity, Part I. which are ſhewn to be the only proofs Reaſon can exerciſe itſelf upon.

Vol. IX. *The Data in Chriſtianity*, Part II.

Vol. X. *The Human Frame*; or the Agents that circulate the Blood explained.

Vol. XI. *Glory Mechanical*, or the Agents of Nature, and the manner of their Agency explained, in Confirmation of the *Principia*, with a *Treatiſe on the Columns of the Temple*, to ſhew that the Syſtem was repreſented there, and its Mechanical Powers reclaimed to GOD.

Vol. XII. *A Collection of ſeveral Tracts*. On the Inſtincts in the ſeveral orders of Creatures. On Mining. Obſervations on things under-ground.

FINIS.

AN

INDEX

OF ALL THE

HEBREW WORDS

Cited in the

Second Part of *Moſes' Principia.*

CHAP. I.

בָּרָא TO *create*, that is, *to produce ſomething out of nothing*, or *to cauſe ſomething to exiſt, which did not exiſt before*, or *before was not in Being.* It is the *firſt production*; but *what* is *firſt produced* is not ſaid in the word. When it is applied (as here Geneſis i. 1.) to the heavens and the earth, to the heavens when they had no light, to the earth when it was *without form* and *void*, it can mean nothing but giving this ſubſtance exiſtence; ſo muſt imply *ſimple* and *abſolute creation*, or *production of the matter in atoms from nothing.* The heathens ſuppoſed the atoms of things pre-exiſting in the Chaos, and only brought out and formed in the creation aſcribed to their Gods: and as the deſign of this Revelation was to rectify men's notions in natural as well as ſpiritual things, it would not have anſwered that end, if בָּרָא had not ſignified and expreſſed *creating* Something out of Nothing: Men might ſtill have doubted whether Matter was created or not, whether it was not eternal, *&c:* And this Account of *Moſes* would not have differed from the heathen account of the creation by their Gods, unleſs the firſt production of the Chaos be taken in, ſince, as obſerved above, they allowed *Creation* in the ſenſe of making this World from pre- P. 2, 3.

Chap. I.

existing atoms. As God created several species of matter, the word ברא is applied to *whales*, and every living creature formed out of matter in the water, and to man; because the atoms of the Matter which creatures are made of, are neither atoms of the heavens, nor of the earth, nor of the water; but עפר מן האדמה, *vegetable matter*, which is dispersed throughout air, earth, and water, as many experiments put past dispute: So the word ברא is as necessary and as properly applied, as *Ver.* 1. to the Heavens and the Earth. As a participle בורא is used for *concreting the atoms into grains*, as Isa. xlv. 7, 18. xlii. 5. Amos iv. 13. because the act of *creation* was joined with that action, when the Spirit of God moved, or was made the instrument of impulse upon the faces of the waters. And as, when a new action is to be performed, there it something done which never was before; this word may with as strict propriety be applied to *an action that was never done before*, as to a *substance which never existed before*; as Numb. xvi. 29, 30. Exod. xxxiv. 10. Isa. lv. 7, 8. Psal. li. 10. Jer. xxxi. 22. As *concreting*, or bringing the Atoms together is part of the idea of what we call *creation*, or the meaning of the word ברא, then with the י *jod* it is very properly used, Gen. xli. 2. בריאת בשר *Fat*, or *full* of flesh; the effects of the atoms of grass, or earth, *adhering together*, when distributed in the blood through the body.——There is a Temple
509. to the *Power* that brought forth the Matter or
(514.) atoms to *augment*, or from seeds to *form* plants and creatures, mentioned 1 Chron. iv. 31. and called בית־בראי *the Temple of the Creators*. This the heathens made an attribute of the שמים *Heavens*, not in the first sense of ברא, *to create from nothing*, which they endeavoured to evade,

by

by their ridiculous *Theogonia*, *eternal Chaos*, *fortuitous concourſe of atoms*, and ſuch like, but in the ſenſe of בּרִיא *to augment* or *make fat*, by producing the atoms from among thoſe of earth and water, and applying them to things or creatures in miniature, in ſeeds, whilſt growing or when grown; and this the heavens *did* and *do*. And to prevent any acknowledgment to the Heavens, and ſet men right, was that noble hiſtory of the *creation* and *formation* written, which though true to the conviction of all mankind, no *antient wiſe man ever found out*. God, there, tells you, He created the heavens and earth in atoms, that they were ſo far from acting upon other things, that they were themſelves inactive.— He tells you, ſtep by ſtep, how he begun and ſupported motion by his own power, and by that Motion enabled them to ſeparate the earth from the waters, form the other globes, &c. till he had framed and diſpoſed the parts ſo that they were fit to go by themſelves and ſupport Motion in other things;—That he formed the vegetables of proper matter, and in proper manner, before they were put into the earth; ſo as each might renew and multiply their ſpecies; and made the fiſhes and fowls of the matter out of the waters; and the beaſts, and laſtly Man, of matter out of the earth, with proper proviſions, powers of multiplying, &c. —And all this, without any aſſiſtance or help from the *Heavens:* And after all, he made a ceſſion of the government of his works to *them* his *Legates*. Chap. I.

מלא *to fill*, be *full*, it ſignifies an abſolute *Plenum*. The Idea is given Gen. xxi. 19.—xxiv. 16. *filled the Bottle with Water*. And as Motion is conſiſtent with this *Plenum*, ſo is it with the aerial *Plenum*.

Chap. I. 33, 34. יסד To *pour out* or *upon*, to *found*. It is spoken of the matter of the heavens or air, whose parts are a dry, subtile fluid, which God has poured one upon another, and by that means filled the universe so full that it cannot admit a vacuum in the modern sense of the word. *Orpheus* attributes this to *Juno*, the aerial or celestial goddess of the Greeks, (who, by the epithet of λευκωλενος Ηρη, given her by *Homer*, is the mixture of *Light* and *Spirit* of which the air is composed.)

Κοινωνεῖς γὰρ ἅπασιν κεκραμένη περὶ σεμνώς.
Πάντων γὰρ κρατεεῖς μόνη, πάντεσσι τ' ἀνασσεις,
Ἠεριοις ῥοίζοισι τινασσομένη κατὰ χεῦμα.

"Communicas enim cum omnibus (rebus) com-
"mixtus pulchre (vel castè). Sola enim omni-
"potens es, et omnibus imperas, aeriis fluctibus
"agitata per *fusionem* [Universam.]"

N.B. The Chaldee uses יסד for the *atoms*, *elements*, or *first principles* of things.

This fluid mixture, by the adverse motion of the light pushing towards the circumference, and of the spirit or air pushing towards the centre with immense force, produces a continual circulation, and thereby forms a general expansion or firmament of the whole air. *

The above-cited Poet also touches this in the the following verses, where, treating of the heavens or air, he says,

——— ῥόμβῳ δινασιν ὁδεύων,
Ὀυράνιος χθόνιός τε φύλαξ, πάντων περιβλήθεις.

"Tur-

* The inspired Writers of the New Testament seem to have copied the usage of the Hebrew יסד in the Greek phrase Καταβολη κοσμε. Καταβαλλω is *dejicio*, to throw, or cast down, as when seed is cast down, or poured upon the ground, so answers to יסד founding, pouring down atom upon atom till the whole was built up. So Heb. xi. 11. *By faith Sarah herself received* Δυναμιν *ability*, (or what you please to call it) εις καταβολην σπερματος for the dejection of seed. The ground must

" Turbinis (tui) vertiginibus incedens, cœlorum Chap. I.
" ac terræ cuſtos, omnibus (rebus) circum-
" jectus."

To this belongs

חוג or חוג (whence our Engliſh word *Cag* or *Keg*, a *roundiſh* wooden veſſel) a *ſphere*, a *circle*, *ambit*; *circumference* or *round* of an orb; the *courſe* of the celeſtial orbs; the *circuit* or *ſphere* of the heavens or air. Alſo an *ear-ring*, a *lamb*; the firſt, on account of its *orbicular* figure, the ſecond, for its *leaping* or *ſkipping motion*, or its being uſed when ~~in~~ a *yearling*, were made ſymbols of this. Alſo a *feſtival* or *holy-day* ſet apart to attribute the creation of the ſubſtance, the formation of the globe of the earth into a machine, and all its mechanical powers and motions to Jehovah the great Author of all the *operations* and *revolutions* in nature. See Job xxvi. 10. (where it is uſed for that firſt *circular motion* of the ſpirit which commenced before the formation of the terreſtrial globe) and Prov. viii. 27. Iſa. xl. 22.† 44.

תבל that *fluid*, *moveable*, *mixture*, *compoſed of the matter* or *ſubſtance of the air* or *heavens*, and *filling the univerſe*. See Job xxxiv. 13. Jer. x. 12. and Pſal. lxxxix. 12. Thine are the heavens, and thine alſo is the earth, תבל the *ſphere*, and its fulneſs——Thou יסדתם didſt *found* them. 45.

צבה

muſt firſt be made fit εις καταβολην σπερματος, or the ſower ſows in vain; and the microcoſm is built up atom upon atom, and grain upon grain, in like manner as the macrocoſm. The *Latin* verb *fundo*, in its two conjugations, ſignifies *to pour out*, and *to found*, or *lay the foundation*, &c.

† Job xxii. 14. ——— He walketh upon חוג the *circumference* of the heavens or air. —— xxvi. 10. He has eſtabliſhed, or deſcribed חג *a ſphere* over the ſurface of the waters. — Prov. viii. 27. when he eſtabliſhed *the ſphere* (חוג) over the ſurface of abyſs, *i. e.* when he formed the chaos into

Chap. I. צבה to *swell*, be *turgid*. The word primarily expresses the force and action of the expansion. Also a *goat*, a turgid lascivious animal continually *inflating* itself, and thence made a symbol of this action of the expansion of the heavens or air.

51. 54. שמים The *Names*, i. e. the *heavens*. It is derived either from שם *Name*,* because the Heavens are the *substitutes*, *types*, *emblems* or *representatives* of the Godhead, the Deity; the ονοματα τα σχηματιστα, as it were; or else from the verb שום to *place*, *dispose*, *regulate*, *put*, *order*, so *rule*, &c. because the fluid of the air, the heavens contain in them all material beings, of which they are the *placers*, *disposers*, or *orderers*, and also really do *rule* over the course of nature. Job xxxviii. 33. Jer. xliv. 17, 18, 19. So by regular derivation signifies and expresses the *use* the heavens were made for. When this word is used for the heavens or airs as they were first created, it signifies *desolation*, &c. when for the same as framed afterwards, and compacted into a machine, *stupendous*, *admiration*, &c. Trin. Gent. p. 2, 19, 80.

This word שמים is the plural number, and masculine gender: *plural*, because of the *Trinity* of agents in it, (viz.) *fire*, *light*, and *spirit*; and *masculine*, by way of *eminence* or *dignity*, these agents being *vice-roys*, and, under God, performing all the operations of nature. That the שמים the heavens really do *rule* over the course of na-

into a sphere or spherical figure. Isa. xl. 22.—— He that sitteth upon חוג the *sphere* of the earth, *i.e.* the sphere of its annual course.

* The epithet of *Samia* to *Juno*, who is the *air*, may, perhaps, come from שמים *Samim* or *Semim*, the Heavens or Air..

ture

ture the ſacred Scriptures in many places declare, as in Job xxxviii. 33. "Knoweſt thou the ordi- "nances of שמים the heavens, didſt thou ſet the "dominion thereof over the earth?" Jer. xxxiii. 25. "Have not I appointed the ordinances of "שמים the heavens or air, and of the earth?" —xliv. 18. & ſeq. "Since we have left off to "burn incenſe to מלכת השמים the *power of* "*the heavens*, we have wanted all things."— Pſal. lxxxix. 30. "The days of the שמים the "heavens or air." For it is by means of the air that the luminaries rule in the day, &c. Theſe texts imply that the שמים have the dominion over the earth, that God inveſted them with this delegated dominion, and that the Jews knew, and attributed the power or rule to the air, but, *judging by appearances*, imagined it was *inherent*, and independent, ſo ſet it up for God, and worſhipped it. As the heavens are the inſtrument which is obedient to God, and with which he *handles* and operates upon matter, שממית a deflection of שם or שום is properly applied as a name of the *ſpider*, Prov. xxx. 28. "which tak- "eth hold with her hands."—So שומים Numb. xi. 5. is the name for *onions*; the onion being the emblem of the שמים the heavens. And a moſt perfect and exact one it is: For let the root and top of the head repreſent the two poles, and cut it tranſverſe or diagonally, and you will find it divided into the ſame number of ſpheres including each other, counting from the ſun or center to the circumference, as they knew the courſes of the orbs divided this fluid ſyſtem into; and ſo the diviſions repreſented the courſes of thoſe orbs. *Lucian* ſays,* the Peluſians in Egypt worſhipped *onions*. Chap. I.

* *Lucian*, *p.* 700. Πηλουσιοται κρομμυον Θεος.

Chap. I. שמש The *Name* or *Subſtance*, or *Light receding*.
54. It is a compound of שם *name* and מוש to *recede*; and is that matter which, *going out* or *receding* from the ſolar focus or athth in a flux of light, hits or ſtrikes againſt the earth and the reſt of the planets and ſtars, and is thence reflected back in ſtraight lines, and makes what we call *day light*, *ſtar-light*, *moon-light* or *moon-ſhine*, &c. As this is God's great agent in diſpoſing and directing material motion, and its effects, the word in the neighbouring languages, as Chaldee, Arabic, &c. ſignifies alſo a *miniſter*, *chief ſervant*, ſo is uſed for *miniſtring*, *cohabitation*, and *coition*: hence the heathens had a temple to this matter of the heavens, mentioned Numb. xxxiii. 49. Joſ. xii. 3. —xiii. 20. Ezek. xxv. 9. called בית־השמות, and בית־השמת, and בית־תישימות differently terminated, according as the natives of each place expreſſed their notions of its power.

56. שם The *name*, *place*, *there*, as there is no *place* void of *air* in one or other of its three conditions of *fire*, *light*, or *ſpirit*.—It is, by way of eminence applied to the heavens, as chief in name; for agency and government in all created matter; and thence taken by the heathens, when they had made the heavens their God, for *that falſe* God; and after reclaimed by the true God, and joined with *his*, *my*, *Jehovah*, *Chriſt*, or put abſolutely without any other deſignation for Chriſt, God, &c. For an image of the heavens, Gen. xi. 4 *

81. כון To *prepare*, *fit*, *form*, *compoſe*, *compact*, *make firm*, &c. Whence comes the noun מכון the *machine* of the material heavens; and as theſe material heavens are made a type and emblem of

* From שם, pronounced as *Sem*, comes from the Greek σημα, Σημειον, and Σημαινω.

the

the immaterial heavens, the place of God's reſi- Chap. I.
dence, this word is alſo uſed for it, 1 Kings viii. 39, 49, &c. The Rabbis uſed this word, written מכין, for *Solomon*'s temple. Indeed the parts of the tabernacle and temple were to repreſent, among other things, the parts and power of the *machine* of the heavens, emblematically. The reaſon of the name is fetched from the act itſelf of the heavens; for as ſoon as they were prepared, and fitted up, and framed into a machine, all other things by their agency and miniſtry were immediately prepared, and framed, and placed into their proper places and functions. Hence our Engliſh word *machine*, and the Latin *machina*, &c. Hence the adverb כֵּן, *ſo*, *rightly*, i. e. whatever is *contrived* and *framed* aptly, and according to a plan, mechanically, or as the north-country word more cloſely to the Hebrew expreſſes it, *canny*, *cannily*, *i. e.* aptly, fitly. Hence the heathen God כון, ρεμφαν and ραιφαν. Acts vii. 45. from Amos v. 26. the *mechaniſm of the whole heavens*. Hence יכין one of the pillars ſet up to ſupport the repreſentation of the ſpheres in *Solomon*'s temple. And as this temple and the tabernacle of *Moſes* were to imitate the heavens as far as poſſible in miniature, they were to be ſet up, without any alteration of the materials, upon the ſpot, and without ſtroke or noiſe of ax or hammer there; the fit ſorts and quantities of matter being before procured, provided and fitted, each part for its proper uſe, and brought near to the place of uſe; as God created the materials of which this world was made, and placed them in ſuch order, ſort and quantity, that the agents, when ſet to work, might, by their natural mechaniſm, form them into the κοσμος we ſee them.

Chap. I. יכל To *perfect*, *complete*, i. e. to make capable of performing what it was designed for, &c. whence כלי a *vase*, *machine*, *instrument* of any kind; hence כל *all*, *every*, &c. and the Greek κηλον, plur. κηλα, used by Homer, Iliad I. v. 53, 383. XII. v. 280. Hymn on Apollo, v. 444. *arms*, &c. of any sort.

P. 94. (96.)

95, 100. (96, 102.) לאך To *send* upon a *message*, or *errand*, to *dispute*, *legate*, &c. whence מלאך *one sent*, *a messenger*, *deputy*, *minister*, &c. and מלאכת a *work*, *deputation*, or *material legate*; something framed to be subservient to other uses, the לאך of the מלאך put in execution, performed, &c. It is principally spoken of the heavens or air, the great instrument and means of all the operations in nature; whose parts God has so disposed that they may *do* his *work*, be his material *legate* or *vicegerent* in the œconomy of the universe: namely, he made them לעשות *to work*, that is, to carry on all *his* operations in nature, from the first formation of things to their final dissolution, Gen. ii. 3. —— It is used for *Solomon*'s temple, and the tabernacle made by *Moses*, 2 Chron. viii. 16. and Exod. xl. 33.

† צבא (from צבה to *inflate*, *swell*, *blow* up, and so *expand*, p. 6.) and so used for the *host of material powers*, i. e. the *force of the expansion*. Hence the worshippers of these powers were called *Zabii* or *Sabæi*. And hence God, as Creator of these powers, claims the title of LORD OF HOSTS.

P. 100, (101.) גד A *troop*. It expresses the manner in which God's three great agents and ministers, the *fire*, *light*, and *spirit*, exert their strength and power, &c. in forming the expansion or firmament, and keeping it in that condition by their joint action; and thence have their particular effects and operations

rations upon matter. These were considered and worshipped by the heathens and apostate Jews under different expressive names, as the *Plasmator*, *Supporter*, *Projector*, &c. and each had its respective temple: thence perhaps the heavens had the appellation of *names*, *Shemim*, in the masculine gender, given them by way of eminence, and used by the heathens for these powers as independent, but by believers as the *types* or *names* of personality in Jehovah, the creator and former of *these powers*. The celestial orbs are included in this word, which are ranked in order in the air, properly furnished with every thing requisite, with all military stores to supply these troops, and invested with powers to regulate, discipline, keep them in order, and make them do their duty. Hence גדי a *kid*, a young *goat*, as it was an emblem of this power, and גדות the *banks* of a river: Any thing which contains and directs the course of water is called in the north a *goat*. Hence perhaps our English word *gad*, to ramble, move freely to and fro, here and there, as the light and spirit do. And I strongly suspect our word *God* has no better original; we derive it from the Persic גדא *Goda*, and the Arabic גוד *God* or *Gud*; and we know from Scripture that גד was the *God* of the heathens, and the apostate Jews, Isa. lxv. 11. and if so, the affected corruption of this word *God*, when we say *e' Gad*, *by Gad* may be the true pronunciation. These powers of the air are sometimes called אלהים, Θεοι, *Gods*, sometimes מלאכים, Αγγελοι, *Angels*, or ministring spirits; according to the different sentiments of the people who used the words; and these are properly the כרובים and שרפים of the Old Testament, which indeed are made use of to represent the Chap. I.

Chap. I.

Eternal Three, who thence take the names of **Cherubim*, and *Seraphim*, as they do of *light*, and *ſpirit*, Pſal. ciii. 20. God's מלאכיו his Angels, are explained by צבאיו his Hoſts, and מעשיו works, and theſe are his material legates, Pſal. civ. 4. And the actions of the heavens are all reclaimed to God as *his* actions, as *He* formed and appointed their operations, —as *voice*, *ſound*, *breath*, *light*, *power*, *ſtrength*, *hands*, &c. not but that theſe in other reſpects, are alſo proper attributes of the Son of God, and as ſuch claimed by him in the New Teſtament.

112, (113) רכב To *ride*, or be *carried*, a *rider*, *eques*, *auriga*, *charioteer*, *driver*. Whence מרכב a *machine* to be *drawn* or *driven*, a *cart*, a *chariot* to carry, without regard to number of wheels or perſons. It is principally to be underſtood of the celeſtial chariot of the firmament or expanſion formed to carry and give motion to all other things. For the grains of air or ſpirit with the *Shemoſh*, &c. are God's drivers—The firmament or expanſion his wings, the matter of the heavens and the orbs, &c. his machine, chariot, &c. the whole frame of nature being at his nod or beck, both as to action and paſſion: And ſo both the powers of theſe agents, and the figures by which they were repreſented, are reclaimed from heathen abuſe to him, as *wings* of *eagles*, *hawks*, heads of *ox*, *eagle*, *ſerpent*, *lion*, *chariot*, *charioteer*, *ſeraph*, *cherub*, &c.

* It appears from the 6th and 7th Volumes of Mr. *Hutchinſon*'s Works, that he ſaw further into this Subject afterwards. *Editor*.

CHAP.

CHAP. II.

HItherto, in the words already explained, the threefold matter of the heavens or air, or rather the tri-une ſubſtance in its three conditions has been treated in a ſummary way. In the words hereafter to be explained, we ſhall treat of the ſeparate parts, or the three conditions of the ſame aerial matter more particularly and minutely: And firſt, of the *air in motion*, or *the ſpirit*.

תה The word ſignifies, whatever is *unconſolidated*, which has nothing ſolid in it, ſo without form, but in a capacity of receiving any: not that the earth had no form at all (Gen. i. 2.) for then it would have been nothing; for every thing that exiſts is in ſome form or figure, but it means the *abſence of adheſion* and *compoſition*, as the phyſicians uſe the word. The parts of the earth were not yet ſeparated from the waters, nor compacted and conſolidated. See Iſa. v. 6. "I will make it בתה "into a waſte or wilderneſs;" where תה is the root, and ב a prefix.

בהו *Void*, *empty*, *hollow*, as caverns and ruins, with nothing but air within them. See Iſa. xxxiv. 11. where both words are uſed — "the line of "תהו and ſtones of בהו," in the ſame ſenſe as here. See alſo Iſa. vii. 19. and Lam. iv. 5.

Theodotion and *Aquila* render תהו by Ουδεν, and בהו by Κενον; and the Greeks, from the earlieſt times, denominated Ουδεν and Κενον their phyſical principles, which are none other but the תהו and בהו of *Moſes*. This ſhews whence they had them: and hence we may underſtand what is meant by the *Vacuum* and *Inane* of *Lucretius*, *&al.* This is the *Bau*, or *Baut*, of *Sanchoniatho*.

There

Chap. II. There are many broken veſtiges of the Moſaic account of the creation among the heathens.

Heſiod ſays,

Ητοι μεν πρωτιστα Χαος γενεθ' αυταρ επειτα
Γαι' ευρυστερνος——

"Firſt of all was the Chaos, and then the "broad bottom'd earth."

Euripides in *Menalippa*—

Ως Ουρανος τε γαια τ' ην μορφη μια·
Επει δ' εχωρισθησαν αλληλων διχα
Τικτουσι παντα καξεδωκαν εν φαος.

"How the heaven and earth was in one form, "which, after they were ſeparated from each "other, begot all things, and brought them "into light."

Ariſtophanes——

Χαος ην και Νυξ Ερεβος τε μελας πρωτον και
Ταρταρος ευρυς
Γη δ' ουδ' Αηρ ουδ' ουρανος ην.

So others.

תהום * The word in a general ſenſe expreſſes any *fluid matter* It is regularly declined from המם or המה, which are but one root, and ſignify *turmultus*, *turba*, and whatever elſe may come under the idea of *multitude*, *tumult*, *diſorder*; and it is applied to a collection of waters, and as properly uſed and applied ſo, as any word perhaps in the Hebrew tongue. When *Moſes* firſt uſed this word, the earth was not formed, and it is by him applied to the whole globe, which was as yet only a fluid turbid maſs; but after the earth was formed, it is uſed for what remained fluid,

* The Ιλυς of the Heathens, the mixture of their Chaos.

namely,

namely, that vaſt collection of waters which lie hid in the great *hollow* or concavity in the bowels or *womb* of the earth, as Job xxxviii. 8. terms it, and which by way of eminence is called the *deep*, and often diſtinguiſhed by the title of the *great deep*, as Gen. vii. 11. and *Job* diſtinguiſhes it from the ſea, ch. xxviii. 14. and ch. xxxviii. 30. calls the ſea the face of the deep. This is the place from whence the rivers come, and whither they return again.† Chap. II.

חשך * to *reſtrain*, *ſtop*, *retard*; it implies the *reſtriction* and *coercion* of *that* action of the air whence light 119. (120.)

† *Plato* has deſcribed this place as if he had it from tradition.

Εις τουτο το χασμα συρρεουσαι παντες οι πολαμοι, και εκ τουτου παλιν παντες εκρεουσι.

Phædo at the end.

So *Homer*, Iliad XXI. 195.

——— ——— μεγα σθενος ωκεανοιο

Εξ ουπερ παντες Πολαμοι και πασα θαλασσα
Και πασαι Κρηναι και α φρειατα μακρα ναουσιν.

* From חשך *Huſk*, may come the word *Huſk*, as *it* is formed by the *reſtriction* and *ſtagnation* of the groſſer parts of the pulſe by the action of חשך; and alſo, as the *Huſk* contains, reſtrains, and bounds the ſeed, as the חשך did the *deep*, and as it now does this ſyſtem at the verge or extremities. Night or Darkneſs was a Deity worſhipped by the Heathens. *Aratus* calls her Αρχαλα Νυξ, *Night the Chief*. *Heſiod* ſays, ſhe had ſacred rites paid to her, becauſe ſhe was the ancienteſt and firſt of the Gods. He makes her the daughter of Chaos, and mother of Æther, or Light, and Day. And *Orpheus* recits a hymn ſung to her, with incenſe, and calls her the Mother of Gods and Men, and the *Geneſis* of all things.

N.B. From hence it appears, that the LXX tranſlation of Gen. i. 1. Εν αρχη ὁ Θεος was a proper hint to the Heathens to reclaim them from their falſe worſhip: It was aſſerting the God of Heaven's ſuperiority over all the Gods of the Heathens, and making him God of Gods, and Lord of Lords. And accordingly Chriſt claims this title, John viii. 25. when they aſked

Chap. II. light is produced. The matter of the heavens or air, at its first creation, was in a state of stagnation, torpid, inactive, and at rest, and was therefore *darkness*, חשך; and very descriptive it is of the air, before the spirit begun to *move*, or *that motion*, by the Almighty *Fiat*, produced light, Gen. i. 2, 3. In proportion as any thing now obstructs *that* action of the air which produces light, darkness in proportion ensues.

123. (125.) קפא To *coagulate*, *congeal*, *condense*, *concrete*, *storken*, or *bring to a consistency*. Hence קופא a *consistent*

asked him who he was, and answers Τὴν ἀρχὴν ὅ, τι καὶ λαλῶ ὑμῖν. And this was then so well understood, that *many believed in him.* (ver. 30.)

The Egyptians also worshipped DARKNESS.—They said, it was the *First Principle*, or *Materia Prima*;——Its sacred rites were performed in subterraneous caverns, which they called Sacred Cisterns ——They thrice invoked it by the name of *Incomprehensible Darkness*, the Θεὸς ξιμόςφ., the *triform God*, infolded within three separate receptacles—— and affirmed that *darkness* was at first cast over every thing.

It is easy, I think, to trace in these Heathen Remains, the broken vestiges of the tradition of the creation and formation handed down by a lineal descent from the first parent of mankind, and which God was graciously pleased to record in writing by his servant *Moses*, to rectify the mistakes which had crept in by tradition.—"Darkness being the Genesis of all things, — the "Mother of Light and Day, — the First Principle cast over "every thing,"— tallies pretty well with the Mosaic account of the creation, and "darkness being upon the face of the deep,"— And when we consider that out of this darkness God commanded light to spring, and that the Heavens or Air were first חשך, then רוח, and then אור; this Θεὸς ξιμόςφ., this TRIFORM GOD of the Egyptians will appear to be nothing but the *Triform Change* Darkness underwent, "when the Spirit of God "moved upon the face of the waters; and God said, let there be "light;" (Gen. i. 2, 3.) which they made a God of, to avoid acknowledging the Creation (for the Heathen world worshipped the Creature more than the Creator) and Moses, by letting us know that Darkness, *i. e.* the heaven or air in its inactive state, was created, stripped it of its imaginary divinity, and thereby gave unto God the honour due unto his name.

body,

body, any matter *coagulated*, *ſtorkened*, &c. — Chap. II.
קופאון *coagulation*, *ſnow congealed*; ſo dark reſs, dark, thick, &c. as Zech. xiv. 6. יקרות יקפאון *the ſmall parts of light ſhall be coagulated or ſtorkened*, ſo become dark. The word principally relates to the matter of the heavens or air moving or blowing as ſpirit, which is itſelf coagulated and congealed air or atoms of light ſtorkened, and which coagulates or congeals other bodies: *Job* calls this agent the *breath* of *El*, and makes *congelation* the effect of its blowing, ch. xxxvii. 10. "By the breath of God *froſt* is given, and the "water diſtended in cakes of ice." So ch. x. 10. "like cheeſe thou haſt coagulated me (תכפיאני)."

ד גליד *Concretion*, *ice*, *privation*, or *concretion* of light, *that* which produces *concretion*, and *froſt*, and *ice*, &c.

עבה *Denſity*, and ſo *cloud* or *clouds*, Exod. xix. 9. 2 Sam. xxxiii. 4. — xxii. 12. — 1 Kings xviii. 45. — 1 Kings vii. 46. 2 Chron. iv. 17.

פלש To *roll* in, or cover with *duſt*, and aſhes. It 125. (120.)
is ſpoken of the duſt, aſhes, or atoms of the heavens or air, and deſcribes the manner of the growth or formation of a denſe grain of air, as Job xxxvii. 16. The atoms of light preſſed out from the ſun by the expanſive force of the firmament, are rolled on to the circumference of this ſyſtem, and there formed into grains and darkneſs, and ſolidity, in which condition the outmoſt extremities of the heavens are ſaid to be, Job xx. 6. — xxii. 14. Iſa. xiv. 14. And the antient Jews and heathens ſay the ſame. Of this ſort and kind was the *darkneſs* in Egypt, which, as *Moſes* ſays, might be *felt*, (ויגש חשך) Exod. x. 21, 22. and which ſeems to have chained them down to their ſeats or places by what is ſaid, ver. 23. and *Wiſdom*, ch. xvii. 2, 16, 17. *with one*

Chap. II.

chain of darkneſs; this motion or irradiation of the light being in ſome degree ſuſpended, the grains being formed ſo denſe, that the units or atoms of the fluid of the air in motion from the light could not paſs through them, and keep the parts divided. Of this ſort, and from this cauſe, is the preſſure we feel upon the back part of the hand laid upon the mouth of the *receiver*, as it is exhauſted of the groſs air: for as irradiation or oppoſite motions of the light and ſpirit cannot *be* but where there is a proper mixture of grains and atoms, or light and ſpirit, it muſt conſequently be weakened, and abate its action, as the mixture is deſtroyed by taking away the groſſer air, or grains; and as the irradiation weakens, the balance (or the ſpring of the air, as they call it) that is, the oppoſite or counter-preſſure to *that* which preſſes upon the back-part of the hand is weakened, and ſo *that* preſſure is felt, which while there was an equal mixture was not, and when that mixture is reſtored by letting in the groſs air, is not felt. The *Egyptians* ſeem, by *Wiſdom*, ch. xvii. ver. 10. to have been ſuch *ſtaunch philoſophers* as to deny this *power* of the air, though they felt it on every ſide of them.

From this word the Philiſtines took their *name* פלישתים, and by *that* ſeem to have been worſhippers of this *power* of the air; and upon this account their champion *Goliath*, (גלית the *circulator*, of Gath, גת *torcular a torquendo*, a *preſs*, ſomething that acts by circulation or turning round, both which names are taken from the *action* by *circulation* of the heavens or air) was ſlain by a ſtone from a ſling, a round ſmooth nodule, worn ſo in the torrents; אבן, a concrete of a ſpecies of grains concreted and kept together by the ſame action of the air which they worſhipped, and had their name from; and ſo *David* tells the *Philiſtine*, that he came in the name of

of Jehovah, צבאות, of thoſe *powers* which they worſhipped for *Elohim*, and by which *he*, Goliath, had defied and reproached the Elohim of Iſrael. Chap. II.

126. (128.) טרח *with great labour to ſupport an incumbrance*, or *incumbent weight*. It is ſpoken of the maſſes of coagulated air impelled or driven from the circumference of the heavens, and forced in ſtrait lines into the ſolar focus or athth, where they are, not without great force, diſſolved, and ſent out thence on every ſide in rays of light. Job xxxvii. 11. Cant. vi. 9.

127. (128.) עלט *Darkneſs*, *cloud*, *caliginous*, the *evening twilight*. In Arabic it ſignifies to be *coagulated*, *congealed*, *condenſed*, *thickened*, or *made thick*, *made fat*, &c. קבל Chaldee is *Darkneſs*, &c. and in the *Targum Onkelos*, Gen. xv. 12. is put for the Hebrew חשך. This word is compounded of על *ſuper*, and לוט *involvere*, to *over-caſt*, *obnubilate*, &c.

ערפל *Darkneſs*, *caliginous*, from ערף to *diſtil*, *deſtow*, *fall down drop by drop*. Alſo the *neck*, becauſe through the hind-part of it the marrow from the brain diſtils into the ſpine of the back, and moiſtens the bones, in the ſame manner as the dew from heaven deſcends and refreſhes things below. Bending the neck, and ſo bowing the head forward, is an abridgment of caſting the head to the ground, is a ſign of worſhip and ſubjection, and breaking or cutting off the neck, is letting the head, fall or caſting it to the ground: Hence its ſignification of *ſubverſion*, to *decollate*, or *behead*, to *cut the throat*, to *deſtroy*; and ſo this word as a verb is well rendered to *diſtil*, for *doctrine*, and for *dew*, Deut. xxxii. 2. — xxxiii. 28. And as a noun plural, ערפים, for theſe *nebulæ*, *diſtillations of the airs (the grains)* or ſmall maſſes, which are continually caſt down, and *diſtilling* from the cir- y

Chap II. circumference of the heavens to the orb of the sun, and in their way upon the dark side of the earth: Isa. v. 30.

צר *Straitness, coarctation.* It is primarily spoken of the grains of air storkened and condensed by compressure, and thence of other things suffering the same kind of compressure by the same agent, though in different degrees.

128. (129.) קדר *Obscurity, blackness,* that is, the ὁ ζόφος τῆς σκότους, that *blackness* of *darkness* mentioned by the apostle Jude, ver. 13. which is the effect of צר *the strong compressure,* such as is the condition of the grains at the verge of this system; the το σκότος τὸ ἐξώτερον, the outer darkness, from whence the idea is taken of the place of future punishment, Matth. xxii. 13.—xxv. 30. where the wicked will be at as great distance from the presence and light of the faces of God, as these grains are from the irradiation of the sun, the material divinity.

(130.) קרר *Cold,* another conditional name; the effect of the presence of those grains, which being too large to pervade the pores, and thin mixed fluids, and so keep them in motion, by means of their size compress and fix them, and so produce cold and frost. When frost is excessive, these grains will be driven in with such violence as to split and tear asunder trees, and parts of rocks, stones, &c. (Instances whereof we had in the great frost 1740-1.) and also to rot the fingers, toes, &c. of persons exposed long to its violence; whence the Latin phrase *frigus urit,* and the use of the word *frigo,* and Greek φρυττω, φρύγω, to *parch, fry,* &c. From this Hebrew word comes the Greek κρυος, *rigor, frigus, hard, stiff, cold,* &c.

There is a clear description of the places from whence these grains which produce cold come,

Job

Job xxxvii. 9. ומזרים קרה.——The root is זר זור זרה to *ſhake*, *diſſipate*, *compreſs*, *expreſs* by *compreſſion*, ſo to *alienate*, *diſperſe*, *ſcatter*, *break to pieces*. מזור *expreſſion*, *alienation*, *declination*. זרה a *circle*, *circumference*, *crown*, &c. *ventilators*, &c. זאר and זרא, Chaldee and Arabic, to *decline*, *recede*, *divert*, *diverge*: Arab. *inward* and *outward*. This word (מזרים) is a name of ſituation, condition, &c. and anſwers all theſe general deſcriptions or uſages of the word, [Root] though ſeemingly different. —— Theſe grains come from the moſt diſtant places, ſo *ſtrangers*.——They are driven to the center, and by the compreſſure of thoſe ſucceſſively following, are *broken* and *diſſolved* in the action of fire at the center, *expreſſed* and *diſperſed* alternately to the *circumference* coagulated there; ſo *inward* to the center, and *outward* from the center; which motion the pointed radii of a *crown* repreſented; the one ſort pointing *inward*, the other *outward*; ſo by this motion they are *ventilators*, &c. and ſo they are from the places, whither the light of which they are formed, is continually diſperſed in the moſt extenſive ſenſe every way, and to the furtheſt diſtances, and the wideſt diſperſions.—They are from the *periphery*, *circumference*, or *circle*, and from the places of *circulations*, *revolutions*, or returnings, and ſo agree to the moſt minute circumſtances. And this explains Job xxxviii. 32. where this word is uſed: "Canſt thou bring forth (מזרות) the denſities in their proper time? Chap. II. 129. (131.)

אפל *Darkneſs thick* and *groſs*. This word expreſſes an effect in its kind greater and ſtronger than חשך: For it ſignifies the concretion of grains of *air* or *ſpirit bound up* in the cloſeſt, denſeſt manner. 131. (132.)

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manner. It is joined with חשך, Exod. x. 22. ויהי חשך־אפלה. It was the חשך made it dark, but the אפלה that made the darkneſs to be *felt*. It is uſed, Job x. 22. "the land (עפתה) of thick darkneſs (כמו־אפל) as whence the grains deſcend; of the ſhadow of death, where there is no סדרים rows or intermixtures of light; but darkneſs as whence the grains deſcend, [ותפע כמו־אפל]." Job makes this a picture or image of the ſtate of Death; and a fine one it is. And the *Book of Wiſdom*, Chap. xvii. 21. makes the Egyptian darkneſs "an image of that darkneſs which ſhould afterward receive them." עפתה is the place at or near the verge of this ſyſtem from whence the concreted grains of air begin their motion, and direct their *flight* to the ſolar fire; אפל is the ſame concreted air as *falling down* to the center, and *preſſing*, *compreſſing*, and *driving* all it meets with before it. We muſt diſtinguiſh between the *land of darkneſs* mentioned here, and the *outer darkneſs* τὸ σκοτὸς ἐξώτερον of the N. T. The firſt is within the irradiating power whence the grains return; the ſecond is without it, beyond the fixed ſtars where it does not reach, but the grains make one ſolid concrete: So the one is the type of the ſtate of death, the other of *that* where there ſhall be weeping and gnaſhing of teeth. Job xxviii. 3. calls this כל־תכלית *the covering over all*, אבן אפל *the ſtone darkneſs*. And this is *Lucretius*'s *Mœnia mundi*. It is alſo joined with נרח and דחה, Iſa. viii. 22. Jer. xxiii. 12. words of impulſe. (Q. If דח be not the root of both, the נ prefixed and ה dropt in Iſaiah, and the נ dropt and ה affixed in Jeremiah, &c.) When theſe grains are in the air in any quantity, we ſay it is *thick*, *heavy* weather, and feel an heavineſs or weight upon our bodies. The word is uſed for a lump or maſs, or grains of any other matter, beſide air,

air, concreted or bound up very close or hard together, as Exod. ix. 32. "For the grains of wheat formed too hard (for it was near ripe) to be hurt, as the tender barley, which was only in the ear. The Heathens used words to the point in hand even as low down as *Cicero*, who has *Crassus* and *Concretus Aer*. *Spissus*, *thick*, *slow*, *Spisso*, *to make thick*, *thicken*, the effect of a slow languid degree of motion, are used to the same purpose: *Æther spissus*, *Caligo spissa*, *Grandine spissa glomeratur corpus*, *Nubes spissa*; Ovid; *spissa regio*, *close soil*, Collumella; *Umbræ spissæ nobis*, Virgil. And *Ovid* has a remarkable description of *Air* being *spissated*, or *condensed*, or *concreted fire*; and *fire* being *attenuated air*; Metamorph. B. xv. V. 247. Chap. II.

In superos aer tenuissimus, emicat ignes,
Inde retro redeunt; idemque retexitur ordo,
Ignis enim densum spissatus in aëra transit *.

Hence,

* *Lucretius* talks the same language, calling the *Spirit dense*, *gross*, *concreted air*, and the *Light bright*, *lucid air*, making their difference to consist in the texture of their parts, the one being large, the other small, and for that reason causing different sensations, the one of darkness, the other the sensation of light. *Lib* iv. *Ver*. 338.

" E tenebris autem quæ sunt in luce tuemur,
" Propterea, quia cum proprior * *caliginis aër*
" *Ate· init* oculos prior, & possedit apertos:
" Insequitur *candens* confestim *Lucidus Aër*,
" Qui quasi purgat eos, ac nigras discutit umbras
" Aeris illius: *Nam multis partibus hic est*
" *Mobilior*, *multisque minutior*, *& mage pollens*.
" Qui simul atque vias oculorum luce replevit,
" Atque *patefecit*, quas ante *obsederat* Ater:
" Continuò rerum simulacra adaperta sequuntur
" Quæ sita sunt in luce, *laceſſuntq*; ut videamus,
" Quod cont a facere in tenebris à luce nequimus;
" Propterea, quia posterior *Caliginis Aër*
" *Crassior* insequitur qui cuncta foramina *complet*;
" *Obsiditque*

* חשך-אפלה.

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Hence, perhaps, comes the Engliſh word *apple*, which, in the general ſignification, is any fruit of the *hard round* kind; and the northern word *appley*, which is applied to a *lump* or *clod* of any matter, particularly *round coals*.

" *Obſiditque* vias oculorum, ne ſimulacra
" Poſſunt ullarum rerum conjecta *moveri*."

i. e. " If we are placed in the dark, we ſee objects that are placed in the light; becauſe, tho' the *concreted dark air*, which is nearer, firſt enters, and takes poſſeſſion of the open eyes, the *bright lucid air* immediately follows, and diſſipates the black ſhades of that air: For *this lucid air is by many degrees more active, ſubtile and penetrating*. This, as ſoon as it has filled the paſſages with light, and *opened* thoſe pores that the dark air had *ſtopped* before, the images of things conveyed in the light immediately follow, and ſtrike upon the eye, and move the ſight. But, if we are placed in the light, we cannot diſcover objects in the dark; becauſe a flux of *dark* and *thicker air* follows the bright and thinner, which is neareſt the eye, and *ſtops up* all the pores, and ſo *choaks up* all the paſſages of the eyes, that the images of things cannot be moved or received into them."

He likewiſe talks of light being preſſed out from the ſun ſucceſſively, atom impelling atom: As *Ver.* 186. *Lib.* iv.

——————" Solis lux & vapor ejus,
" Propterea quia ſunt e primis facta minutis:
" Quæ quaſi *truduntur*, perque Aeris intervallum
" Non dubitant tranſire, *ſequenti concita plaga*,
" Suppeditatur enim confeſtim lumine lumen,
" Et quaſi *protelo ſtimulatur fulgure fulgur*."

i. e. " The rays and vapour of the ſun, becauſe they are compoſed of the minuteſt ſeeds or atoms, are eaſily *impelled forward* through the intermediate air, [*i. e.* thro' the returning ſpirit] *the following urging or preſſing on the part that went before*: For one beam of light is inſtantly ſupplied by another, and *every ray is preſſed on by another behind*." — And though they would father a *Vacuum* upon him, it is plain he meant nothing by that word but *Rarior Aër*; For what can be more deciſive for a Plenum than theſe lines:

" Et quaſi multa brevi ſpatio ſubmittere debet
" Lumina ſol, *ut perpetuo ſint omnia plena*."

" The ſun ought to emit many rays in an inſtant, *that there* " *may be kept up perpetually an abſolute Plenum*."

And

And I am inclined to ſuſpect, by the by, that the Latin word *malum*, for the apple, had its name from the *evil* conſequences which the eating the forbidden fruit brought into the world. —But this belongs not to this place. Chap. II.

אבן a name of condition, of the ſame idea, for *an heap* or *maſs* of any ſpecies of atoms or ſmall grains made *cōncrete by compreſſure*, and adhering ſtrongly in a lump; and becauſe atoms or grains of *ſtone* (for moſt ſorts of them were firſt formed into grains or ſands) are generally in that condition, and they moſt common, the word is applied ſingly to a piece of any of the common ſorts of *ſtone*; when to any peculiar ſort, the name of the ſpecies, or of the uſe or value, is added: It is likewiſe applied to any *concrete*, as of *metal*, *water*, *air* or *fire*, with the addition of the name of the ſpecies of atoms ſo concreted. Deut. viii. 9. Joſ. x. 11. 1Sam. xxv. 37. Job xxviii. 2. xli. 15. xxxvii. 30. Iſa. xxvii. 9. xxx. 30. Ezek. xxviii. 14. Zach. iv. 10. Exod. i. 16. Jer. xviii. 3. And it is joined with the preceding word אפל, Job xxviii. 3. אבן אפל. 131, 2. (132, 3.)

רחח or דח *Impulſe*, to *impel*; *move by impulſe*; the act of driving in the grains and driving out the atoms to and from the center and circumference, and *è contra*. No mention of *gravity* or *attraction*, or any *properties* in matter, but every thing is attributed to the *impulſive force* of the *all-compreſſing* and *all-compelling* expanſion, which according to the different ſorts and ſizes, and quantity, &c. of the atoms of which bodies are compoſed, acts upon them in giving each its proper gravity, and place, keeping it there, or taking it up, or ſetting it down; and when any body is put into motion, by a foreign force, continuing that motion, by preſſing in behind, till by 133. (134.)

Chap. II. that means the reſiſtance, which the fluid gives before, becomes greater than the preſſure behind.

134. צר, צור, and צרר, * this word in different forms expreſſes the thing by the condition, and in general ſignifies to *environ*, and *bind* any parcel of things or matter by implication, *cloſe* by *compreſſure*. Hence צרור צרר a *ſtone*, a *binding*, or *ligature* †; a *calculus*, a *ſcruple*; ſtones being uſed for weights.—Hence יצר, to *form*, *frame*, *faſhion*, *work*, &c. and in clay, potters-earth, or wax, namely, to *impreſs* a certain new form or figure upon any matter, and to preſerve that form ſo *impreſs'd*.——*Orpheus* attributes this to his *Apollo*, whom he calls

Πανα Θεον δικέρωτ' ἀνέμων συρίγμα θίεντα
Παντὸς ἔχοντα κόσμου σφραγίδα τυπώσην.

Pana, *Deum bicornem*, *ventorum ſibilos jaculantem*
Omnis habentem mundi ſigillum imprimens & informans.

Hence alſo צר, of which before, p. 20. And,

צר *Straitneſs*, as it were *preſſure*, and *coarctation*, primarily ſpoke of the air, the heavens, or expanſion, and thence, ſecondarily, of any other *agent* that has power to compreſs, &c. Hence ſtones and rocks derive their *coheſion* and *hardneſs*. Hence alſo the idea is carried down to

* From this attribute *Egypt* had its name מצרים, as alſo had *Mizrim* the ſon of *Ham*. *Egypt* was not called *Mizraim* from *Mizraim* the ſecond ſon of *Ham*, but *both* took the name from this attribute of the air. And hence we ſhall have one view of the propriety of the miracle of making this *power of the air*, *bind* them all with one chain of darkneſs. Exod. x. 21, 22, 23. Wiſd. xvii. 17.

† Job xxix. 6. צור is uſed for an oil-preſs —— וצור יצוק עמדי פלגי־שמן, and the *preſs* poured me out rivers of oil.

other

other things under *compreſſure* or *ſtraitneſs*. See Zeph. i. 15. Iſa. v. 30.——xxx. 6. Pſal. cxvi. 3. —xcv. 5. Iſa. xliii. 10. Job xxvi. 8.——xxxviii. 9. Prov. xxx. 4.—xxvi. 8. Amos ix. 9. 2 Sam. xvii. 13. Chap. II.

צוק To *blow*, *drive*, or *preſs together*, to *adhere*, *make adhere*, &c. It is underſtood of the *act* of *expanſion*, which *impels*, or makes *ſubſide* or *ſettle* every thing in nature, according as each is *impelled* or *ſubſides*. Hence—— 136. (137.)

יצק *Effuſion*, to *pour out* or *upon*, ſpoken primarily of the pouring out of the grains of air in the manner as is done from the circumference to the center, where they are melted into *duſt* עפר, preſſed outward by the ſucceeding grains, ſo reformed and made adhere in grains again, as is beautifully deſcribed Job xxxviii. 37, 38. by the compariſon of a foundry, where the ore-duſt is melted into lumps of what ſize you pleaſe. Hence it ſignifies any thing *poured out*, *melted*, *founded*, *caſt*, or *fuſible*, &c. and thence as an adjective, *ſtrong*, *robuſt*, *firm*, *hard*, &c. and alſo to *ſet* or *lay down*.——If we conſider that carrying down oil, or &c. till ſomething ſtops it, is the ſame action, and performed by the ſame agent as carries down melted braſs, till ſomething ſtop it, and makes the parts adhere, and become ſtrong, hard, &c. and if into a mould, or &c. figures it; and alſo is the ſame action and agent as fixes the parts of ſtone together, or carries the parts of ſtone ſo fixed downward, till ſomething ſtop it; then we ſhall ſee that the word does but ſignify *one ſort* of *action*, though that *one action* has different effects upon different ſorts of atoms, or upon each ſame ſort of atoms in different conditions, as ſolid, or fluid, &c. and the ſeemingly different uſages or ſignifications of the word will

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be hereby reconciled, as Gen. xxviii. 18. Exod. xxxvi. 36. Job xli. 14, 15. Jof. vii. 23. 1 Sam. xiv. 4. 2 Sam. xv. 24. Job xxix. 6.——xxxvii. 18. This is the *agent* that by compreſſion makes adhere not only grains of air, or ſolid parts of, but the whole earth. By *this* the atoms of ſtone, and thoſe of metals in the water, after the diſſolution of the flood, were, by *compreſſion*, driven to each other, and ſo formed into grains before they ſettled: by *this* the atoms of *metal*, after diſſolution in ſpirits, are formed into grains: by this the atoms of *ſalt*, in water, are formed into grains: by this the atoms of water, in the atmoſphere of air, are formed into grains: by this the atoms of *ſpirits* are formed into grains: by this the atoms of *air* are form'd into grains, and at ſuch ſizes reſpectively as the compreſſure of this fluid gets comparatively ſufficient hold of them, each is preſſed down, or moved by the continual contact, and material impulſe, during its whole courſe, according to ſtated rules, with the matter and impulſe remaining upon it when ſtopped. Theſe grains of air are formed near the verge or circumference of the heavens, and each, when formed of ſufficient ſize, is preſſed down in a ſtraight line to the center of the ſun, and ſome of them in their courſe to the earth, &c. and are called נבלי, *Nebulæ*: of which hereafter.—— But as the few words which follow, though very different from, are ſometimes confounded with the preceding ones, we muſt diſtinguiſh and ſeparate them. As,

1*ſt*. נשא to *lift*, *carry up*, or *upwards*. Whence
143. (144.) נשאים *vapours carried up* into our atmoſphere from the abyſs, the womb or ſtorehouſe, from whence they iſſue in.

2*d*. קיטור *Steam*, *fume*, *vapour*, *ſmoke*, &c. (a general word for ſmoke or vapour of any kind) and theſe

these when they fall down upon the earth are called Chap. II.

1. מטר *Rain.*
2. ברד *Hail.*
3. שלג *Snow.*
4. ענן *Clouds.* Whence it signifies an *augur*, or *cloud-monger*, who predicts futurities by the countenance of the clouds.

Return we now to the matter of the heavens or air; to which belong

נבל To *flow*, *defluxion*, &c. to which corresponds 145.

בול, בל, בעל That which has the *power of moving itself*, and making others *move* or *act*, as *lord*, *husband*, or an *officer* among men who has the command, *a general*, &c. in inanimate things, it is the *agent* that *moves* and *acts* upon other things, and by its *agency* and *force* makes them *move* or *act*. There are *three parts* or *conditions* of the heavens or air, which have this power *, not of themselves, but mechanically, by investiture from God.

1. חמה The *solar fire.*
2. שמש The *rays irradiating* from the *solar fire.*
3. בל, בל, בול, *Air*, *spirit*, *wind*; that is, according to the Heathen, or Gentile theology, *Belus*, *Jupiter*, &c. of which first, and the root is

בלל To *confound*, *mix*, *dash*, &c. The *mixture* or *mixer*; because the *spirit*, of which, under this name or attribute, we now treat, mixes itself 146.

* So בעל שלשה the *ruler in three*, 2 Kings iv. 42. and 2 Kings vii. 2. שליש is used for some *great officer*, or, &c.

in

Chap. II. in its revolutions continually with the *light*. Of this attribute under the name of φυσεως, *nature* sings the most antient of poets, *Orpheus*;

Ευανθεια πλοκη, φιλια, πολυμιστε——

"Benè florens, *plicatura*, amica, *multum-mixta*.

A-kin to this word is

147. ערה to *shed*, *pour out*, *profuse*, &c. Whence יערים *pourings-down*, or *pourers-down*, &c.—— spoken of the *grains* of *air* or *spirit*, which are poured down from the circumference towards the sun, the center; and in a spiritual sense, to the effusion of the *Holy Ghost*, the *Spirit* of God, Isa. xxxii. 15. In respect of this *pouring* of the heavens were the libations, *pourings* out, or down of the drink-offerings of the heathens, after claimed by God.

150. רוח * to *respire*, *dilate*, *refrigerate*, or *refresh*: thence *spirit*, *wind*, &c. It is spoke of the matter of the heavens or air in motion inward toward the sun, which in its way *respires*, *moves*, *dilates*,

* From רוח comes ריח *vapor*, *odor*, ὀσμη, *that* which the *spirit* carries to the nose, and which gives the sensation of *smell*. It is applied Job xiv. 8, to the fine corpuscles of vegetable matter contained in water as their vehicle, which the action of the רוח spirit, with the light, carries up into seed or plants for its formation and augment, מריח מים יפרח "By means of the "*reek* of water it (viz. the tree) will germinate." So to the fine fume which arises from fire, and gives a smell, as Dan. iii. 27. ריח נור "The *reek* of fire had not left its *marks* or testi-"mony upon them" [לא עדת בהון] Our word *reek* comes from hence, which we apply to the vapor, or fume, or steam, which the air carries up from *fire*, wet cloths, or heated liquors and such like; as also the word *rokey*: as for instance, we call a *rokey day*, when the *reek* or *steam*, which the expansion (i. e. the spirit and light in joint action) raises from the abyss, hangs in the air, and is not carried high enough, thinned and dispersed.

and

and by that means becomes the instrument of compression to every thing, and principally of vegetative motion, to plants, and respiration to animals. The Poet above-cited gives this attribute to his *Juno* (Gr. Ηρα, Heb. הרה). Chap. II.

Ψυχοτρόφους ἄυρας θνήτοις παρέχουσα προσήνεις
Χωρὶς γὰρ σεθεν οὐδὲν ὅλως ζωῆς φύσιν ἔγνω. 51

"*Animas-nutrientes auras* mortalibus præbens benignas,
"Sine *te* nam nihil omnino *vitæ naturam* novit."

This matter, by its first agitation or motion, was itself compressed into grains or micæ, and so became *spirit*.

רחב The *dilatation* as it were of a thing. It signifies any sort of space, or the very dimension itself of matter, be it in loose atoms or grains, or in body, or so much *place* as matter, or any body, fluid, or solid, dry or moist, occupies, takes up, or possesses; for there is no *place* without something *placed*, which constitutes the *place*. The word is merely relative; and therefore where there is *nothing* to be *dilated*, or *expatiated*, there is no *dilatation*, nor any *space*: and if matter was annihilated, as some love to talk, *space* would be annihilated therewith.——From this *attribute* of the air, the harlot רחב *Rahab* had her name; and it is not unlikely that her prostitution was a service paid to *that* power. 151. (152.) Jos. ii. 1, &c.

תכן to *calculate*, *weigh*, *compute*, or *sum up* by *numbers*; so *direct*, *order*, *machine*, &c. The word is compounded of תכה to *conjoin*, and כוו *cannily*, *cunningly*, *proportionably to its office*, or *fitly*. It refers to the joint action of the *light* and *spirit*, disposing and regulating every thing by *weight*, 152.

Chap. II. *weight*, and *measure*, and *number*, whence arises that ὁ κόσμος, that *beautiful frame of nature* which we behold. Psal. lxxv. 4. it is applied to proportioning the mixture, and so force of the בלימה the light and spirit, on which the earth is said to hang, Job xxvi. 7. and which are also called its pillars, so that it should not move faster or slower, further off, or nearer to the sun than is proper for the good of the whole: And thence it is carried up in a spiritual sense to *Christ*, the due mixture, temperament and proportion of whose righteousness, merits and mediation, have all along borne up the pillars of the earth, and mitigated the weakness and wickedness of the inhabiters thereof, and prevented the immediate and daily execution of divine justice.

154. משקיל it is the *instrument* or *cause* of that action, commonly called *gravity*,——*that* which *weighs*, *sorts*, &c. This is attributed to the spirit, Job xxviii. 25. though it is the light that acts upon the solid particles or internal substance of bodies, and is the *gravitor*; yet, by the greater hold the compression of the airs or expansion has upon the grains, the parts of the spirit, than upon the atoms or parts of light; one part successively impels another, and the whole is both *agent* and *patient*. Among the heathens, *wings* of birds were the symbols of *this power*, which were also ordered to be graved in the Tabernacle and Temple, to reclaim *it* as God's agent, and creature.

(162. (164) רחף to *move backward and forward*, *flutter*, *hover*, *move by incubation*, i. e. first itself, and then other things. By this word is expressed that agitation of the air which begun the first motion, and from which light was struck out, and whence the other acts of formation were effected. It is only

only thrice uſed, Gen. i. 2. Deut. xxxii. 11. Jer. xxiii. 9. To this refer Chap. II.

163. (165.) uſed only twice. Iſa. xxxviii. 21. Lev. xxi. 20.

מרח to *bind around*, *ſwaddle*, Rabbin. to *ventilate*, *purge*, Arab. to *anoint*: all from רוח the *ſpirit*. For the ſpirit deſcending in grains from the circumference, by their ſizes binds and compreſſes, and ſo becomes מרח an inſtrument of compreſſure and motion; whence *it* alſo acquires other names from its different ſituations, conditions, or offices: as

ערפל when theſe grains fall down from the periphery of the heavens or airs, by which *darkneſs* is made. See p. 19.

ענן when they bind the fluid mixture or body without power of moving it, &c. And

רוח *reſpiring* and *dilating*, when they were made an inſtrument to move it. See p. 30. This is a word of office, and always implies action in it; a *mover*, *impeller*, ſpiritually an *inſpirer*; and whether applied to the *material* or *immaterial* ſpirit, implies it in action, in his office performing his part; which will explain Acts xix. 2.*

נפח

* Acts xix. 1, 2. St. *Paul*, finding certain diſciples at *Epheſus*, aſked them if they had received the Holy Ghoſt when they believed? To which they reply, Ἀλλ', οὐδὲ εἰ πνεῦμα ἅγιόν ἐστιν, ἠκούσαμεν; which we tranſlate, "We have not ſo much as "heard whether there be any Holy Ghoſt," as if the words related to the exiſtence of *that* Perſon in the Trinity. But that they do not, is evident from the context; for they tell *Paul* they were baptized unto *John*'s baptiſm, and *John* at his baptiſm told his diſciples, that he which ſhould come after him, (i. e. *Chriſt*) ſhould baptize them with the Holy Ghoſt (and with fire) as is recorded by all the four Evangeliſts. They could not then ſay, they had not then heard whether there was any Holy Ghoſt. The ſame expreſſion occurs John vii. 39. οὔπω γὰρ ἦν πνεῦμα ἅγιον—which we tranſlate right enough—"For the Holy Ghoſt was not yet given," becauſe that Jeſus was not yet glorified. And this was the caſe; *Epheſus* was at

since

Chap. II. נפח to *blow*, *refreſh*, *blow in*, &c. It chiefly and principally relates to and expreſſes the action of
171. the ſpirit *blowing* into the ſun's orb by the com-
(173, 4.) preſſure of the expanſion, and in its paſſage moving the earth and other orbs. Hence מפוח a *bellows*, a *ſufflatory*, through which the ſpirit is admitted and emitted. And

בית־התפוח a Temple dedicated to *this ſufflatory* power of the air among the heathens. And

נפחא ſome *bird*, the ſymbol of the ſame power among the Chaldeans. And alſo

תפוח the fruit of, and the tree of *good and evil*, which in the plan of the garden of *Eden* repreſented *this power*, and with which, by eating of it, we expected to be inflated, inſpired, &c.

To this may be referred the verbs

a great diſtance from Jeruſalem, and theſe diſciples had only heard *John*'s baptiſm, that the law was typical, and that he who ſhould fulfil all was now appearing, but had not heard that *Chriſt* had performed his part, had ſuffered, been raiſed up, taken into the eſſence, and re-united to the glory, ſo glorified as John vii. 39. much leſs had they heard that the Holy Spirit was now performing his grand part, acting wonders in a ſpiritual ſenſe, as his type, the material ſpirit did at the formation, and reformation of the earth. Had the tranſlators taken the ſame liberty as above, John vii. 39. and rendered the words— "we have "not ſo much as heard whether the Holy Ghoſt be yet given," this would have been near the ſenſe: but the expreſſion can only be cleared by conſidering that רוח, (for which πνευμα is put) is the *mover*, *impeller*, &c. and when applied to that perſon in Jehovah, ſuppoſes him in action in his office, performing his part. And ſaying, *he was not* by that name, or *the Holy Spirit yet was not*, is ſaying he was not yet executing his part in the œconomy of the covenant. The tranſlators ſeem to have underſtood the paſſage in this ſenſe, becauſe they refer in the margin to Acts viii. 16. where 'tis ſaid that the Holy Ghoſt had not yet fallen on any of them, and to 1 Sam. iii. 7. where it is mentioned that *Samuel* did not yet know the Lord, neither was the word of the Lord yet revealed to him.

נפח in the Ethiopic tongue, to *blow* the *trumpet*, or *horn*, or some *wind-instrument*, with which this attribute of *power* was perhaps worshipped. 172. Chap. III.

יפח to *breathe*, *draw the breath:* whence vocal music might be used in this service; and

פאח to *diffuse*, *odour*, *fragrancy*, *yield* or *send out a savour*, *perfume*, &c. as it signifies in the Arabic: whence *this power* might also be worshipped by burning *perfumes*, and those services required by God of the Jews.

CHAP. III.

IN the last chapter we have treated more particularly of the *air* or *spirit*. In this, the words which next follow for the most part relate to and concern *that other* state or condition of the heavens, or aerial matter, which is opposite to the spirit, and which we call *Light*. The chief name of this condition of the heavens is שמש, the *rays from the sun*, of which we have sufficiently treated above.

אור * *light*, *splendor*, *illumination*, *irradiation*, &c. it is the participle present of אר, applied to a river, 175. (177.)

* From אור is derived the Greek ἠρ, ἠρανὸς, ἠρανία. Hence *UR* of the Chaldees had its name, which was dedicated to the LIGHT, and where that rebellious service seems to have been at a great height; upon which account *Abraham* was commanded by God to leave the place, Gen. xii. 1, &c.—xv. 7. Acts vii. 3. Heb. xi. 8.

There is a remarkable passage in *Lucian* relative to the formation of Light, and its operation in forming the world, which wonderfully tallies with the *Mosaic* account. It is this—*Bourdelot's Lucian*, Paris 1615. B.

Ἐρωτες

Chap. III. river, Amos viii. 8. and expreſſes *flowing*, which, when ſpoken of the air, implies all thoſe benefits which

Ερωΐες——Μόνον ἡμῖν σὺ, Δαῖμων ὑραίνιε καιρίως παραστηθι, φιλίας ἐυγνώμων, ἐιροφάνλα μυστηρίων Ἔρως ὁ κακὸν νήπιον ὁποῖα ζωγράφων παίζησι χῆρες, ἀλλ' ὄν ἡ πρωλόσπορος ἐγενησεν ἄρχη. τέλειον ἐυθυ τοχξένλα. Σὺ γαρ ἐξ ἀφανῆς κ) κεχυμένης ἀμορφίας τὸ πᾶν ἐμόρφωσας. ὥσπερ ἓν ὅλω κόσμω, ἰάφον τινα κοινὸν, ἀφελῶν χάος, ἐκεῖνο μὲν ἐς ἐσχάτω ταρτάρε μυχὲς ἐφυγάδευσας, ἔιθα ως ἀληθως.

Σιδήρειαι τε πύλαι καὶ χάλκεος ὁδὸς
Ὅπως ὑπ' ἀρρήκλω δεδὲν φρερᾶς, της ἔμπαλιν
Ὁδὸ ἔιργλαι· λαμπρω δὲ φωῖ τὴν ἀμαυρὰν
Νυκλα πεἰάσας, παντὸς ἀψυχω τε κ) ψυχὴν ἔχοντος
Ἐργέτα Δημιεργός.

" Do thou only ſeaſonably aſſiſt us, Etherial Demon, thou patron " of friendſhip, and prieſt of myſteries, LOVE. Not ſuch a " miſchievous little urchin as the painters childiſhly draw thee, " but ſuch as the firſt principle, the great ſeminary of all things " produced thee, perfect as ſoon as made. Thou formedſt the " univerſe from its confuſed and formleſs ſtate. And after ſe- " parating and diſperſing the circumfuſed chaos, in which the " whole world, as in one common ſepulchre, lay buried; thou " droveſt it to the utmoſt confines of Tartarus,

" Where iron gates and bars of ſolid braſs
" In durance irrefrangible confine
" And its return prohibit. Thou the beams
" Of radiant light, expanding o'er the face
" Subfuſce of ſquallid night, of animate
" And things inanimate becam'ſt the great
" Opificer."

Here is *Light* under the title of *Love*, produced by the בראשית the *Principium*, perfect at once, forming and poliſhing the mundane frame, diſentangling and diſſipating the chaos, and driving the grains, *i. e.* Darkneſs, to the extremities of this ſyſtem, fixing and ſtorkening them there.

Here we may obſerve, (1.) that the original tradition muſt have been very ſtrong and univerſal, that could ſo happily eſcape from the wreck of truth, amidſt the rocks of vulgar errors and poetic fables, down to *Lucian*'s time. And, (2.) that they then knew that the Poets, &c. had diſguiſed and mangled the original tradition by imagination and allegories. The Phœnician doctrine of *Moſchus* is, that after the chaos, the plaſtic ſpirit of the univerſe brought the atoms together by Love, (*i. e.* Light.) ἠράσθη τὸ πνεῦμα τῶν ἰδίων ἀρχων.

The

which proceed from light, becauſe theſe benefits ariſe from its *flowing*. Chap. III.

מאור the מ prefixed, which makes it an inſtrument to *give light*, or *from which* light is actually at that preſent time *flowing*. Chaldee.

אויר

The Author of the *Argonantica* has a paſſage relative to this, "We will firſt ſing an hymn upon the antient chaos; how the "heavens, the ſea, and the earth, were formed out of it. We "will ſing likewiſe *that eternal, wiſe, and ſelf-perfect Love*, "(*i. e.* Light) which reduced this chaos into order." *

* Πρεσβύτατόν τε, καὶ αὐλοτελῆ πολύμηδιν Ἔρωτα.

I ſhall here add a paſſage from the *Argonantics* relating to the formation, ſuppoſed to be ſung by *Orpheus*, l. 1. v. 496.

——————ὰν δε καὶ Ορφεὺς
Λαιῇ ἀνασχόμενος κίθαριν πειρᾶζεν ἀοιδῆς.
Ἤειδεν δ' ὡς γαῖα καὶ οὐρανὸς ἠδὲ θάλασσα
Τὸ πρὶν ἐπ' ἀλλήλοισι μιῇ συναρηρότα μορφῇ,
Νείκεος ἐξ ολοοῖο διέκριθεν ἀμφὶς ἕκαστα.
Ἠδ' ὡς ἐμπεδον αἰεν, ἐν αἰθέρι τεκμαρ ἔχουσιν
Ἄστρα σελήναιη τε καὶ ἠελίοιο κέλευθοι.
Οὐρεα τ' ὠς ἀνατεῖλε ζωὰ πόλαμοι κελάδοντες
Αὐῆσιν νυμφῆσι, καὶ ἑρπετὰ παντ' ἐγενοῖο.

So *Virgil*'s *Silenus*, Ecl. 6. v. 31.

"Namque canebat uti magnum per Inane coacta
"Semina terrarumque *animæque* marisque fuiſſent,
"Et liquidi ſimul ignis: ut his exordia primis
"Omnia, & ipſe tener mundi concreverit orbis.
"Tum durare Solum, et diſcludere Nerea Ponto
"Cæperit, et rerum paullatim ſumere formas.
"Jamque novum ut terræ ſtupeant luceſcere ſolem;
"Altius atque cadant ſubmotis nubibus imbres:
"Incipiant Silvæ cum primum ſurgere: cumque
"Rara per ignotos errent animalia montes."

N.B. In verſe 2d, *animæ* is put for *Aeris*, *Ætheris*, or *Cæli*, becauſe *air*, or *æther*, the matter of the heavens is the *anima* of all animals. See *Lucretius*, l. 6. v. 129, 693. and l. 3. where he makes *calor*, *aër*, *ventus*, his *anima*.

Virgil is ſuppoſed to have copied theſe Greek lines.——

——————ἐρατὴ δ' ἔι ἔσπετο φωνὴ
Κρείων ἀθανάτης τε Θεὸς, καὶ γαῖαν ἐρέμνην
Ὡς τὰ πρῶτα γένοντο, καὶ ὡς λαχε μοῖραν ἕκαστος, &c.

That

Chap. III. אויר whence *air*, and *aer*, and Αηρ, *clear*, *bright air* or *weather*, the condition the air is in by the action of the sun, which makes it flow or fluent.

176. (178.) יקר *small*, *attenuated* light, so *clear*, *bright*, and so *precious*, *honourable*, *glorious*, &c. Whence the Greek ιχωρ, Iliad V. v. 340. 416. the *blood* which flowed from *Venus* and *Mars*, upon being wounded, which were no other but these *Powers* of the *air* personated and embodied, *i. e.* turned into persons, and clothed with bodies. To this refer the Chaldee קפרי, *light*, *swimming on the surface*.

182. (183.) עמד to *subsist*, or *be subsisted*, *sustain*, or *be sustained*, *support*, or *be supported*; or *to support*, so *sustain*, or *make subsist*; whether spoken of *persons*, *powers*, *force*, *office*, *service*, *actions*, *pressures*, *motions*, *forms*, *strength*, *hardness*, &c. It implies a power within or without to continue the subject in the same *condition*, whether *that* be of *rest* or *motion*, but no fixed local station. As a noun, it signifies a *supporter*, a *pillar*, &c. as the pillar of the cloud, and of the fire, which was not a *standing* but *moving support*. This is the word by which the translators have fastened that error on the sacred Scriptures of making the earth stand still, and being fixed upon pillars. The column of rays of light between the sun and

That by Ερως is meant *Light* or *Fire*, is plain from the *Scholiast* on the passage above of the *Argonantics*, where speaking of the systems of the philosophers, he says,

Τρίτον δὲ ἔρωτα γεγονέναι καθ' ἡσίοδον, ἵνα τὸ πῦρ παραστήσῃ· Πυρωδέστερον γὰρ παθὼν Ερως.

How wonderfully these accounts agree with the Mosaic history of the formation, I need not mention: and they all are derived from one common tradition.

earth,

earth, and the column of ſpirit on its oppoſite hemiſphere, are called its pillars, ſupporters, or ſuſtainers, upon which God has placed the globe, between which it moves, and is moved by them; by that vibrative motion or trembling (viſible through teleſcopes) deſcribed Job ix. 6.—See Ch. xxvi. 11. As theſe embrace the earth on every ſide, and compreſs it with great force, they are called, 1 Sam. ii. 8. Chap. III.

מצקי the *compreſſors* of the earth, from צוק, *p.* 27. The antients divided the preſſure of the air into columns, thence called the pillars of the world, of the earth, &c. as above; but they were not *fixed*, but *moveable* ones. And the heathens repreſented this preſſure by pillars in their temples. See Judg. xvi. 26, 29. Eſther i. 6. They had alſo *high* towers, and temples to the heavens, places for obſervations, and perhaps for ſacrifices, called Judg. ix. 46. 190. (192.)

צריח *exaltation*, namely, of the rays of light expreſſed from the ſolar fire, and thence on every ſide ſent out to the circumference of this ſyſtem. From theſe pillars of the heavens, as they are called, Job xxvi. 11. which are the ſame as the ſupporters of the earth, the pillars which both Hannah and Job ſpeak of, 1 Sam. ii. 8. Job ix. 6. the fable of *Atlas* ſupporting the heavens on his ſhoulders took its riſe*. His name is derived from תלה to *hang*, *ſuſpend* upon a ſupport, and with the א prefixed אתלה *Atlah* the *ſupporter*; and Job xxvi. 7. the earth is ſaid תלה 191.

* There is ſo remarkable a paſſage in the *Opuſcula Mythologica* relative to this that I cannot omit it.

Ατλας——αταλαιπωρως αποδιδοντα τα κατα της εμπεριεχομενης εν αυτω λογης γιγνομενα, κ) ουτω την ερανην βασταζοντα, εχειν δε κιονας μακρας τας των στοιχειων δυναμεις, Καθ' ας τα μεν ανωφερη, τα δε καταφερη εστιν, υπο τουτων γαρ διακρατεισθαι την γην. —— *Phurnutus de Atlante*, p. 202. Dutch Edit.

to

Chap. III. to be hung on בלימה, compounded of בל the *ſpirit*, and ימה the column of light, which makes יום day. The chief ſymbol of this power was

195. (196.) תמר the *palm* or *date tree*, *ſub pondere creſcens*, which is not broke or bent, but grows under any weight.

ערב the *ſallow* or mixed-coloured *willow* tree; the ſymbol of the mixture of the *light* with the *ſpirit*. The ſignification of the word is *mixture*, to *mix*, &c. Whence the *evening*, when and where that mixture of light and ſpirit takes place. The *woof*, from the threads being ſhot, one this way and the other that way. Alſo *ſweet*, &c. as Jer. xxxi. 26.* that ſenſation in general ariſing from a due temperament and juſt mixture; any exceſs producing ſenſations, which we diſtinguiſh by other names, as *bitter*, &c. From this attribute the *Arabians* took their name †. Thence the puniſhment of the *mixture* of inſects to Egypt for worſhipping this power; and thence the Jews were forbid *mixtures*. Refer hither

כפת ſome condition of the heavens mentioned Job xxxvi. 32. ‡ The *curvity* of the circumference, which, as the hand does a ball, takes or catches the atoms of light, and ſo concretes them by circumpreſſion. *Boughs* of palm and other trees, as ſymbols of this *power*, and what *it*

* Jer. xxxi. 36. "Upon this I awaked and beheld, and my "ſleep was ערבה *ſweet* unto me." The idea is preſerved here: *ſweet ſleep* being the effect of a due *mixture* and temperature of the human frame.

† From ערב perhaps comes Ἔρεβος, *Erebus*. And alſo the Greek verb αραβεω, and the noun αραβος, an *hollow mixed ſound*. Homer—— αραβησε δε τευχε' επ' αυλω. Iliad Δ. 504. &c.—αραβος δε δια στομα γινεται οδοντων. Il. κ. 375.

‡ על־כפים כסה־אור.

repre-

represented, were carried in their hands at one of the Jewish festivals, Levit. xxiii. 40. Neh. viii. 15. Chap. III.

בדל to *divide, separate, exchange, take from one and give to the other, a segment, separation, exchange*, namely, *that* which was made between the Light, and Spirit, by the opposite motion of the atoms, and grains, which produced an expansion, *that* a compression, and *that* a *division* between the light and between the darkness, Gen. i. 4. * This was making an alteration, shifting places between them, bringing them by turns to the condition and place of each other, and was performed by the immediate power of God at first; since by these agents, the light inward at the center, and darkness outward at the circumference, interchangeably shift their situations: the matter is the same, the matter or substance of the heavens or air, but the condition is changed by the transposition. To this the next word has some relation. 229. (231.)

תרפים *dividers, distributors, idols, figures*, representatives of this alternative power and condition of the heavens or air.† The antient Poet *Orpheus*, in his Hymn to Night, thus sings of this attribute: 232. (234)

* "The *Jews* light a lamp upon the evening of the exit of "the Sabbath, to divide the day from the night; and the pro- "fane days of the week from the holy Sabbath; and this they "call נר הבחלה, the *lamp* or *light of division, or separation.*" The original of this custom was, probably, symbolical of this first division between the light and the darkness made by God, Gen. i. 4.

Buxtorf, in his Chald. and Talmud. *Lexicon*, says, from Rabbi *Simeon* in his Logic, that ברל is *that* which distinguishes and discriminates one thing from another.

† In *Medr. Schem.* fol. 58. 4. the word תרפים, *Terephim*, is explained by ברולקי, *dividers*, that is, images which prophesy, that is, divide or separate truth from falsehood.

Hus-

Chap. III.

Ἡμιτελὴς, χθονία, ἠδ' ἐρανία πάλιν αὖτὴ
Ἐγκυκλια——
Ἣ φάος ἐκπέμπεις ὑπὸ νέρτερα, κὴ πάλι φεύγεις
Εἰς ἀίδην

" Semiperfecta, terreſtris, & cœleſtis iterum
" eadem circularis——
" Quæ lucem emittis ad infra, atque iterum
" ipſa fugis ad orcum."

Theſe *Teraphim* in a ſpiritual ſenſe are calle the *healers*, the idea being preſerved; for heal ing is only a proper and due ſeparation of th juices, &c. the noxious from the alimentary; health being a due temperament, or conſtitution of the ſeveral parts whereof an animal is compoſed both in reſpect of quantity and quality, and this in reſpect of the mind as well as of the body.

251. (254.) מָחַר a *ſubſtitute*, *one thing had in exchange for another*; which of days is the *next*, in traffic the *price* for the goods, &c. and which therefore were called by the ſame name. To this refers

252. (254.) פָּנָה which explains the manner of this exchange of one day for the next. The word ſignifies to *turn towards*, *turn about*, ſo *turn*, or *bring a new face to view*, &c. and is often uſed for the dark ſide of the earth being by little and little turned into the light, whence it ſhews the earth to be revolved, or circulated, as Deut. xxiii. 11. Exod. xiv. 27. Pſal. xc. 9. Jer. vi. 4. Judg. xix. 9. Job xii. 22. Amos v. 8.

253. (250.) פּוּחַ to *blow*, *blow in*, &c. uſed for the impulſe of the ſpirit turning the earth; which, by blowing into the *evening edge* of the cap of light, turns *that* from, and the *other* towards the ſun continually, and thereby compleats

pleats the revolution; ſo the evening was, and the morning was the firſt day, and every ſucceeding day. To this belongs Chap. III.

נשף the *action of impulſe by blowing againſt, the blaſt of the ſpirit*, which, as above, by means of the light directing its motion, circulates the earth. Its ſignification as a verb is to *blow*, *blow againſt*, *blow ſtrongly*, *impel*, *turn or drive round*, or *circumrotate*. The *ſnoring owl*, which draws in, and blows out the ſpirit or air with a great force and noiſe, is its ſymbol, and ſo bears the ſame name. The inſtruments of this action are called

מוצאי *carriages*, *vehicles*, namely of the air, by which and upon which the globe of the earth is alternately carried from the evening and from the morning, and ſo by making days goes forward in its progreſſive motion, Pſal. lxv. 9. 254 (250.)

בית־החגלה the *temple of revolution*, or of the *revolver*. An houſe dedicated to this *operation* of the heavens or air, Joſ. xv. 6.—xviii. 19. The name is a compound of חוג, to *circumgyrate*, a *circle*, or חגג, to *move in a circle*, and *within a circle*; and גול to *exult*, *leap*, *dance*, *trip it* on the light, fantaſtic toe, as *Milton* expreſſes it; to expreſs the joy of the mind by outward geſtures of the body; as turning round, and ſuch like; or גלה, uſed 1 Sam. ix. 15. to *turn round*, *move in a circle*, as גלה אזן, a philoſophical expreſſion for the air in ſound traverſing the circles of the ear. Whence 255, to 257. (257, to 259.)

גלל a *ſphere*. To this refer the word חג (*p.* 5.) which in Arabic is uſed for the *celebration* of the *feſtival of Mecca*, alſo a *year*, alſo a *bracelet*, an *ear-ring*, *any circular thing*, &c. which were ſym-

Chap. III.

bols of this power: and also the Syriac חוגל, to *go round, go about*, to *circuit*, a *circuit*, to *project*, an *eclipse*, &c. This *attribute* in a God is to make something go round, or in a circle, and so make it turn round in its going, and is principally meant of the earth. One of the services paid to *it* by the heathens was dancing in circles, and each turning round in their circularly progressive motion *. So in the Hebrew חג is a feast, or festival, where this service was reclaimed, and paid to Jehovah the creator and former of these powers, Exod. v. 1.—xii. 14.—xiii. 6. xxiii. 14. The *lamb*, a *yearling*, was a representative of this power, and was called חג,

* *Homer* has two beautiful descriptions of this manner of dancing, *Iliad* Σ. v. 491, and 593.

V. 491. Εν τη μεν ρα Γαμοι τ' εσαν ειλαπιναι τε·
Νυμφας δ' εκ θαλαμων, δαιδων ὑπολαμπομενων,
Ηγινεον ανα αστυ. Πολυς δ' υμεναιος ορωρει.
Κουροι δ' ὀρχηστηρες εδινεον, εν δ' αρα τοισιν
Αυλοι, φορμιγγες τε, βοην εχον· αι δε γυναικες
Ιστασαν θαυμαζον επι προθυροισιν εκαστη.

V. 593. Ενθα μεν ηιθεοι κ' παρθενοι αλφεσιβοιαι
Ωρχευντ', αλληλων επι καρπω χειρας εχουσες·
Των δ' αι μεν λεπτας οθονας εχον, οι δε χιτωνας
Ειατο ευητες, ηχα στιλβουσας ελαιω·
Και ρ' αι μεν καλας στεφανας εχον, οι δε μαχαιρας
Ειχον χρυσειας εξ αργυρεων τελαμωνων.
Οτε μεν θρεξασκον επισταμενοισι ποδεσσι
Ρεια μαλ', ως οτε τις τροχον αρμενον εν παλαμησιν
Εζομενου κεραμευς πειρησεται, αικε θεησιν·
Αλλοτε δ' αυ θρεξασκον επισχας αλληλοισι.
Πολλον δ' ιμεροεντα χορον περιταθ' ομιλος
Τερπομενοι· δοιω δε κυβιστητηρε κατ' αυτους
Μολπης εξαρχοντες εδινευον κατα μεσσους·

I have given the description at length, because, besides the particular for which it is cited, it contains other antient customs, as the use of torches or lamps at marriages——musical instruments and singing, sacrifices, &c.—the use of oil—crowns or garlands, &c.

which

which by offering it to Jehovah, was an acknowledgment that he was master of this power, Exod. xxiii. 18. Psal. cxviii. 27. And the *lamb*, among other things, being, by the name חג, made the type of Christ, proves that he was Lord of the same powers, so Jehovah: and I make no doubt but in this feast, in their *circuitings*, they had a regard to that happy *revolution* when the *Sun of righteousness* should arise with healing in his wings, that *Lamb of God*, which taketh away the sins of the world: an event certain, though *then* future. Chap. IV.

CHAP. IV.

A Further description of the Expansion of the Heavens or air, called the *firmament*, made by the mutual conflict of the light with the spirit; the one pushing inward to the sun, the center, the other pushing outward from the sun, towards the circumference.

רקע to *expand*, *distend*, *diffuse*, *fill*, *thin*, &c. *fluids*, and to *compress*, *drive together*, *keep firmly together*, and *establish* solids. And with the י *Jod* in the third order, as in 260. to 264.)

רקיע it expresses the effect this action has upon the air or one substance of the heavens, which by the motion of its different parts at the same time, the atoms outwards, the grains inward, the atoms pressing in among the grains, the grains among the atoms, produces a general *expansion* and compressure upon the whole machine and

Chap. IV. and all its parts *. The word is applied to a plate of ductile metal hammered, to wings expanded, or such things, which is extending one

* Dr. *Edmund Dickinson's Physica vetus & vera*, p. 233. "Scio quidem cœlum hoc inferius (quod secundum esse judicunt Hebræi) a LXX interpretibus historiæ Mosaicæ vocari στερεωμα, id est, *firmamentum*, non autem quia solidum esse censerent; sed quoniam hæc inferiora ab illo *firmari* credebant. *Rakiab* certe non tantum *expandere* sed et *firmare* significat. Et non Assyrii tantum (qui primi fuerunt Astronomii) sed & veteres Hebræi Græcique philosophi, simul & Latini cuncta hæc inferiora vi cœlestium *constringi* ac *firmari* dixerunt: nec immerito quidem, nam quamvis hæc immensa pars universi, quam philosophus noster (*Moses*) *expansum* vocat, tenuis sit & mollis, ac quasi dissoluta natura, res omnes attamen, quas ambit, & diitensivo suo complexu stringit, quodam modo firmat. Quocircà LXX sapientes qui non *expansionis* habitum ac constitutionem tantum, quantum vires ejus & admirandos effectus respiciebant, scite & sapienter illam *firmamentum* nominarunt." — "I know that this lower heaven (which the Jews take to be the second) is by the LXX interpreters called στερεωμα, that is *firmament*, not because they thought it solid, but because they believed that things below were made *firm* and *solid* by it. For *Rakiab* is not only to *expand*, but also to *make firm* and *consolidate*. And not only the Assyrians (who were the first astronomers) but also the antient Hebrew and Greek philosophers, together with the Latin, asserted, that all things below were *compressed* and *kept together* by the stress of the heavens. Nor indeed without reason; for though this immense part of the universe which our philosopher (*Moses*) calls the *Expanse*, be a thin, soft, diffused fluid, yet does it some way or other give a firmness to every thing it surrounds, and constrains by its springy embrace. Wherefore the LXX seniors, who had not so much respect to the habit and constitution of the expansion, as to its force and wonderful effects, skilfully and wisely called it the *firmament*."

Job (chap. xxxvii. 18.) describes the firmament to be *firm* or *strong*, as a molten speculum; for the *specula* of the ancients, as also of the Hebrews in *Moses*'s time, were a mixture of metals and minerals, as brass or orichalcum, &c. which adhere strongly by compressure. See Exod. xxxviii. 8. And perhaps *Homer*, when he calls the heavens πολυχαλκον, and χαλκοβαλες Δω, may mean no more than the expansive and compressive force of the air.—But if we understand him literally, we see whence the mistake took its rise.

edge

edge one way, and the other, the other way, and gives the idea. The consequence of this Expansion is described in the next word: Chap. IV.

שחק to *move to*, to *strike against*, and so *beat to powder*. The action, a *conflict*, *contest*, *strife* between two parties in motion, (by the *expansive* force as above) and of course towards each other, and so opposite ways. The agents, the matter of the heavens or air, which from their action, and the manner of it, are called 261, to 269: (265. to 274.)

שחקים the *conflictors*, *contesters*, *strugglers*, *æthers*, acceding and receding, and so making an universal *struggle* and *stress*.

And because these *agents* by this *conflict* produce rain, dew, (מן הארץ, Gen. ii. 6.) which they *force*, or raise, from the abyss; (called the *blessing* ברכת of the deep that lieth beneath, Gen. xlix. 25. Compare Deut. xxxiii. 13.) and which are the means of vegetation and fruitfulness; upon that account they have the attribute of

אמן or אומן a *nurse*, *steward*, *guardian*, *provider*, and thence *true*, *faithful*, &c. the action whence it has its name; is that of a nurse carrying an infant in her arms and bosom, as Numb. xi. 12. which is the very thing these *agents*, the שחקים, do to the earth, which they carry in their arms, between the opposite columns of light and spirit, and nurse and suckle with the precious things of the *Shemesh*, the moon, the heavens, the dew, and the deep. But these offices are not taken from the *nurse*, and applied to the שחקים, but from them to the nurses, guardians, stewards, for they are appointed such in chief, and are foster-providers to all created things, and so to the children of God in this system, 268-9. (272, 3.)

true

Chap. IV. system, *true* and *faithful* to their trust. But as they are God's creatures and instruments, what they do is truly and eminently *his*, and to be attributed to *him*, whom we are to look upon, believe in, and rely upon, as the real, great dispenser of these blessings. *Orpheus* gives this attribute to his goddess *Nature*,

Πάντων μὲν σὺ πατὴρ, μήτηρ, τροφὸς ηδὲ τιθηνὸς.

tu "Omnium enim tu pater, mater, nutrix atque "altrix."

A-kin to this is the word

270. (274.) צחק sometimes read for שחק of which above; its signification is to *play*, *laugh*, &c. namely, from the kind of *conflict* up and down, with which the body is moved in the act of *laughing*. From this word the patriarch *Isaac* took his name; and in the idolatry of the molten calf, the Israelites are said, Exod. xxxii. 6. to sit down to eat and drink, and rise up to צחק *play*, as this play was in commemoration of the joint action of the light and spirit, which the heathens called *risus cœlorum*, the *laughter* or *play* of the heavens; in which sense we use the word *play*, when any thing swings or *plays* freely forward and backward. And among the Rabbins יום־צחוק, a *play-day*, is put for a *festival*, or *holy-day*; that is, a day in honour of, or sacred to the *conflictors*, *struglers**. The Chaldee and Arabic use of this word is

* We, at this day, call the scenical representation of any thing, by action and words, a PLAY. Originally it was all *action*: "*Post effert animi motus interprete lingua*; afterwards "these actions were interpreted by speech." Our pantomimes are of the first sort; and shew, that the motions of the mind, and the characters may be marked and distinguished by proper gestures and motions of the body, as well as by words. *Horace* gives the preference to the first, and says, *De Arte Poetica*, l. 180.

"Segnius

is to *shine*, *lighten*, *clouds*, *light*; *lightening*, *splendor*. Two serpents twisted round a rod, such as *Mercury*'s *caduceus*, were the emblem of the complicated action of the light and spirit (expressed by this word and שחק above) which are in a continual *struggle* to take place of each other. And two serpents knit together in the middle were called *Hercules's knot*, as *Hercules* was Ἡρας κλεος, the *glory* or *splendor of the air*, i. e. the *air* or spirit illuminated, or mixed with *light*. Chap. IV.

עשה. The first time the word is used is, Gen. i. 7. for *making* the *firmament*, ויעש אלהים את הרקיע, and it signifies *making*, *framing*, giving a power of *moving mechanically*, &c. and this *making* is the root of all material and mechanical *making*. It is used for *constituting* Moses and Aaron *king* and *priest*, where the same idea is retained: for as *Moses* was not *king*, nor *Aaron*, and the men (1 Kings xii. 31.) *priests*, till they were *made*, though they existed as *men* before; so the matter of the heavens or air was not an *expansion* or *firmament*, though it existed as *matter*, till God, by the steps there mentioned, *made* the pre-existing atoms capable of *expanding*, *compressing*, and *acting* mechanically, &c. So, *v.* 16. God *made* (יעש) *two great lights*. (Heb. את־שני המארת הגדלים) 262. (266.)

> "Segnius irritant animum demissa per aures,
> "Quam quæ sunt oculis subjecta fidelibus."

(viz.) —— that "what comes in by the ears strikes the mind less "forcibly than what is represented to the eyes."

——If so, the philosophy and religion of the antients might be preserved by hieroglyphicks, and such sort of plays and games; and the bare mention that such hieroglyphicks were set up, and such plays or scenical actions performed, when recorded in such an emphatical and ideal language as the Hebrew is, where the idea in the original word, or root, leads you to what the thing is, might explain their meaning as well as a circumlocution; and then the Mosaic ritual, which is Christianity drawn in hieroglyphicks, might be a proper school-master to bring them unto Christ.

Chap. IV. Whether you take the words as tranſlated, or as Mr. *H.* renders them, a *ſecondary marth*, or *candleſtick*, the *great ones*, meaning the *moon* and *planets*, the verb עשה, will ſtill imply that the matter was not capable of being *lights*, or a *candleſtick to hold lights*, till the action implied in עשה *made* it ſo. And if we carefully conſider the idea in this word, and from it conſtrue the Greek verb Ποιέω, *facio*, it will aſcertain the uſage of *that* word in the New Teſtament, and free thoſe texts, where it occurs, from the idle criticiſms of men *claſſically* learned *only*.

272. (276.) אל the force of the preſſure of the heavens or air in the act of שחקים, the *conflictors*, *conflicting:* the interpoſition or *irradiation* of the light and ſpirit; ſo, as a prepoſition, it is *to*, and *from*, as the *irradiation* is interpoſed *to* and *from* the ſun the center; and as this *irradiation* keeps things at proper diſtances, the word אל ſignifies the adverb of prohibition *NE*, to *keep at its diſtance:* ſo a *ram*, *(aries)* as the ſymbol of this operation; and alſo *another animal*, which the tranſlations call an *hart* or *ſtag* *, the ſame perhaps as the *Scarabæus*, becauſe for *Scarabæus* in the Hebrew, the Chaldee puts *cervus volans*, the *ſtag-fly*. From the ſame origin is

274. (278.) אלית the *morning-ſtar*, the *day-break*, becauſe then the *irradiation* begins to exert itſelf by *breaking* into the ſpirit, &c.

This word in the *Canticles* is uſed ſymbolically for Chriſt, the true and real *irradiator*, the true *morning-ſtar*, and *ſun* of righteouſneſs. See the claims under אל, Exod. xv. 11. Pſal. xxix. 1.—lxxxix. 6. Job xxxviii. 7, &c.

* The *ſtag* was offered as a ſacrifice in moſt other countries inſtead of the *ram*. The word is uſed for a *door-poſt*, and plural maſculine אילים, Job xli. 16. for I know not what.

Hence

Hence the Greek word Ἥλιος, which the Sep- Chap. IV.
tuagint tranſlation hath put for the שמים, *heavens* or *air*, אור the *light*, חמה and חרם the *ſolar athth*, and *fire*, and שמש the *Shemoſh* or rays of light flowing from the ſolar fire every way; becauſe the thing there treated of, comprehends the expanſion and its ſeveral parts: אל is rendered alſo Οὐρανὸς, Iſa. xiv. 13. and the worſhip to this power was continued or renewed by *Jeroboam*'s golden calves, for which they are reproached, Jer. xlviii. 13. and Amos iv. 4. and v. 5. as it was by the molten calf in the wilderneſs, Exod. xxxii.

עץ־עבת *complicated wood*; trees wattled, or 275.
plaited, or twiſted, as *eſpaliers*, perhaps, repre- (279.)
ſenting the *interweaving* or mixing of the light and the ſpirit, and their *complicated* action. Ezek. vi. 13. we have אלה עבתה, under which they offered ריח ניחה, *reek*, or ſavour of *reſt*, by which, perhaps, they aimed at *that complicated one*, who was to give *reſt* and atonement to all mankind *.

צעצע *circuiting circuits*, *circuitions*, that is, intimate- 279.
ly and continually revolving, making circles (283.)
within circles, &c.

כר and כרכר *revolution*, and *revolution of revolu-* 286.
tions, what the French call *tourtour*: and ſym- (290)
bolically a *wheel*, a ſaddle, or other horſe-furniture, as rings, chains, collars, and other ſuch like ornaments, put *round about* their horſes necks, repreſenting the rotation of the heavenly machine, and circulation of the orbs; alſo a *weaver's ſhuttle*, which, by its motion in weaving, is an apt repreſentative of the *darting in*

* Chriſt, when upon earth, ſays, "Come unto me, all ye "that labour and are heavy laden, and I will give you *reſt*." Matth. xi. 28.

Chap IV. and *cut* of the rays of light and ſpirit which weave the *aerial web*, the *firmament* or *expanſion*.

Hence alſo

287. (292.) כור a *furnace*, a *meaſure*, a *circuit*, a *going in* and *coming out*, *ingreſs* and *egreſs*, as we ſay, a *paſture*, i. e. *circuits to feed upon*; a *captain*, *leader*, or *general of forces*, namely, going out and coming in upon their circuits, extremely to the purpoſe, as ſymbolical of the matter of the heavens going out, and returning upon its revolutions, its circuits at the extremities, to the center: alſo ſymbolically, *dux gregis*, a *leader of the flock*, a *ram* puſhing and butting with his head and horns: alſo a warlike inſtrument, called a *battering ram*; and, Iſa. lxvi. 20. a *machine*, which by turning round goes forward.——So *dancing in circles*, as 2 Sam. vi. 14, 16, * thence *lauding*, *praiſing*, &c.

* 2 Sam. vi. 14, 16. the word is uſed for *David*'s dancing before the ark —— "And *David* מכרכר, ſkipped or capered, like a goat," ſays *Pagninus*'s Interlineary Verſion, ἀναχρόμενος and ὀρχέμενον, ſays the LXX. The root is כר, and ſignifies to *keep* ſuch a *round* as ſheep do in large paſtures—or pedlars who ſtroll about in trade—or ſoldiers who patrol upon the guard or watch, or as they do who dig a well, grave, or ſuch like. It ſignifies alſo a *buſhel*, and *furnace*, from their round ſhape; or a *furnace*, perhaps, from the fire being *reverberatory*, as in thoſe in which they purify gold. Here the root is doubled, and expreſſes dancing in rays or circles, now ſpringing forward, now bounding back, like the στροφὴ and ἀντιστροφὴ of the antients, now turning round, and bounding and ſpringing from the ground in that manner which is ſo remarkable in the lamb and deer, which requires great ſtrength and activity, and which is ſo much admired at this day in our ſtage-dancers. The occaſion was great and ſolemn. *David* had newly aſcended the throne, to which he was raiſed by God's ſpecial appointment.——He had obtained a ſignal victory over the *Philiſtines*, the worſhippers of the power of the air, who had formerly conquered the *Iſraelites*, carried away the Ark, and 'tis likely praiſed their God the Air by this ſervice of dancing: and he was now bringing back the Ark of the *Elohim* in triumph, whoſe name is called by the name of *Jehovah of Hoſts*, who inhabiteth the Cherubim. What more p o-

per

&c. from the manner and gesture as *above*. All which have a community and conformity of ideas, Chap. IV.

per than to praise Jehovah in the dance, and attribute and reclaim to him the powers of the air, which these airlators thought inherent, and essential, and eternal, and therefore a God.—By *David*'s Answer to *Michal*, it looks as if *Saul* had lost the crown and kingdom, for neglecting, among other things, to pay this Service to Jehovah: For we know from Scripture that his heart was not perfect with God, as his successor's was. And the same reason might make his daughter offended with it, because her heart was not right with God: Had it been so, she would, like *Miriam*, the sister of *Aaron*, and *Jephthah*'s daughter, and as the matrons of *Jerusalem* met *Saul*, have went out to meet *David*, with her maidens, with minstrels, and joined the choir to praise Jehovah in the dance and song. But her proud heart could not brook to see the king of *Israel* divest himself of his royal robes and dignity, and instead of entering in triumph in the midst of the acclamations of his people, to have the Ark ride triumphant, and himself an humble attendant, in the humble dress of a Levite, dancing and playing, among his servants, to Jehovah.

The translation of *Michal*'s reproach, *ver.* 20. has given occasion to much profane ribaldry — "How glorious was the king "of Israel to-day, who *uncovered* himself to-day in the eyes of "the handmaids of his servants, as one of the vain fellows "*shamelessly uncovereth himself*." Whence it has been concluded, that *David* danced naked, except a linnen sash tied about his waist; though the text says, he had on an ephod, a garment which came down below the knee, which the LXX render ποδήρη, a long *Median* vestment. The word rendered *uncovered*, is גלה, which is to *turn round*, *circulate*, and the phrase דגלות נגלות rendered *shamelessly uncovered*, may be applicable to the turns and rounds of the dance: as if she had said, "Thou hast acted a noble part to day, in *jigging* among the handmaids thy servants, as *jigging jiggs*, one of the ורקים vain fellows *, or idolaters." For so idolatry and idolaters are often called in Scripture. See 2 Kings xvii. 15. His answer is, that it was before or to the faces of Jehovah he danced, *attributing* to him thereby the *power* and the *glory*, who chose him before her father and all his house, to appoint him ruler over the people of Jehovah, over Israel, &c.

The ingenious and learned Author of the *Life of David*, thinks the 24th Psalm was sung in this procession; the king beginning the concert with *ver.* 1. "The earth is Jehovah's, and "all that is therein, the compass of the world, and they that

* The LXX has it, as one of ἐξεστηκότων the *dancers*.

"dwell

Chap. IV. ideas, and are symbols of the same thing, the *irradiation*, and thence *expansion* of the heavens or

" dwell therein, for he has founded it upon the seas, and ma-
" chined it upon the floods."—Be this as it may, his dancing was attributing to Jehovah by actions, what this does by words. The procession seems to be described, Psal. lxviii. 25. " They " have seen thy goings, O *Elahim* the goings of *El*, my king, " in the sanctuary; the singers went before [*David* at their " head] the players upon instruments after, in the midst of the " damsels playing with timbrels, then the princes of Judah and " their councils or congregations." And I concur with the author, that there is great reason to believe the procession was made on the *Feast of Tabernacles*, because *Solomon* afterwards removed the Ark into the Temple in that Feast. *Dancing* was an instituted ceremonial of that festival, as appears from Deut. xvi. 14. " Thou shalt rejoice in thy dance;" which is the precept given for the observation of it: And *David*'s dancing may be particularly recorded as a signal instance of his humility and piety, in thus descending from his royal character and dress, in honour of his God and King. And if we raise our thoughts yet higher, and consider *David* as knowing what the Feast of Tabernacles and the Ark emblemed, *viz.* the Divine Logos being in the fulness of time to be *made Flesh*, John i. 14. and to *tabernacle* with us, as the Ark and Cherubim, the pledge and assurance of that future event, did with them; then he had, in this scene, a glimpse of Christ's triumphant entry into *Jerusalem* in this feast; the true design of which the people acknowledged by cutting down branches of palm and other emblematical trees, going out to meet him, " and crying Hosanna to the Son of " *David*, blessed is the king of *Israel* that cometh in the name " Jehovah, Hosanna in the highest." Well might the *typical David* rejoice in the prospect, though distant, of the benefits the *real David* was to procure for him, and all the Israel of God, when after swallowing up death and sin in victory, he was to
Heb. ix. 24. ascend into heaven, of which the holy of holies was the figure, and sit down for ever at the right-hand of God. And in what extacy must he sing—" Lift up your heads, O ye gates, and be " ye lift up ye everlasting doors, and the king of glory shall " come in."

I have met with a passage in the *Bibliotheca veterum patrum*, relative to this subject, which deserves transcribing " Res " enim quæ sunt sæculo, sunt exemplaria constitutionis supernæ " Jerusalem, ubi in sancta sanctorum introiit præcursor Chris- " tus, quem *prius descripsit* ac *præfiguravit arca* templum in- " gressa, quando chorum duxit et *saltavit in typum Christum*

" *David*

or air. This the antients represented by *wings* of birds, or images with wings, and Chap. IV.

" *David* exultans. Quoniam quæ perierat ratione prædita ho-
" minis arca, in qua in primis repositum fuerat Dei testamentum,
" est inventa & liberata a malignis alienigenis qui eam redege-
" rant in captivitatem."

There is evidence enough to prove that *dancing* was a religious rite both to *Jew* and *Gentile*; the one giving glory thereby to God for his creation and formation, the other recognizing by it the heavens or air as eternal, and their mechanical powers as essential. For, beside the instances above of *Miriam*, of *Jephthah*'s daughter, and the matrons of *Jerusalem*, the service paid to the *golden calf* was of this sort; and 1 Sam. xxx. 16. the *Amalekites*, after the spoiling of *Ziklag*, celebrated their victory, and doubtless praised their Gods, in the same manner, and by the same service, as the idolatrous *Israelites* did to the calf; they sat down to *eat* and *drink*, and rose up to *play*—for the text says, 'They were spread abroad upon all the earth, *eating*, and *drinking*, and מחולים *dancing*.—In the Psalms the children of *Israel* are directed to attribute radiation to Jehovah in the *Dance*, with all instruments of music, as *David* is here recorded to have done. Dancing was one of the chief ceremonies of all their festivals, whence the *Hebrew* word for Feast or Festival is חג a *dance*. The Feast to Jehovah in *Shiloh* was celebrated yearly by* *dancing*, Judg. xxi. 20. And the women of *Israel* met *Judith* and made a dance for her †. Heathen records speak full to the antiquity and religion of this practice. *Homer* and *Hesiod* make a chorus of *dancers* the ornament of the shields of *Achilles* and *Hercules*. The *Thessalians*, as *Lucian* reports, called their rulers *dance-leaders*.

Athenæus, l. 14. 628. cites a verse of *Socrates*.

Οἱ δὲ χοροῖς κάλλιστα Θεοὺς τιμῶσιν, ἄριστοι
Ἐν πολέμῳ.———

" Who in the chorus honour best the Gods,
" Are best in battle."

This shews that Dancing was a religious rite, and looked upon as acceptable to the Gods.

Pindar calls *Apollo* Ὀρχηστὰν ἀγλαΐας ἀνάσσων, The Dancer, King of Light.

Homer, in his *Hymn* to *Apollo*, represents him as playing and dancing to the sound of his lyre in these lines.

φόρμιγγ' ἐν χείρεσσιν ἔχων χαρίεν κιθαρίζε,
Καλὰ κὴ ὑψι βιβάς.———

* חול, † *See* Judith xv. 12, 13.

" Graceful

Chap. VI. and by the *heads*, &c. of their other symbols; by *chariots*, called, chariots of the *Shemoſh*, or Light;

" Graceful ſuſtain and ſtrike the ſounding lyre,
" More graceful now, and lofty in thy gait."

Upon which Dr. *Delayne* ſays, one would imagine the Poet had beheld *David* in the proceſſion.

Xenophon informs us, that *Cyrus*, a little before his death, led the dance in a religious proceſſion. *Cyropæd.* l. 8.

And *Lucian* has a treatiſe upon Dancing, from whence I ſhall cite two remarkable paſſages.—*Bourdelot*'s *Lucian*, Paris 1615. p. 502. A. ΠΕΡΙ ΟΡΧΗΣΕΟΣ.

—Ἀλλ' ὅ γε τ' ἀληθέσ ἄλα Ὀρχησεως πέρι γενεαλογεῦντες, ἅμα τῇ πρωτῃ γενέσει των ὅλων φαῖεν ἂν σοι καὶ ὄρχησιν ἀναφῦναι, τῷ Ἀρχάνῳ ἐκεινω Ἔρωτι συναναφανεῖσαν. Ἡ γεν χορεία τῶν ἀστέρων, καὶ ἡ πρὸς τὰς ἀπλανεῖς τῶν πλανήτων συμλοχὴ, καὶ εὔρυθμος αὐτῶν κοινονία, καὶ εὐτακτος ἁρμονία, τῆς προλογόνε ὀρχήσεως δείγματα ἐστι.

Here we have an account 'of dancing being co-eval with the 'firſt formation of the univerſe, and the great God *Love*, i. e. '(*Light*) and that the harmonic chorus of the ſtars was its origi-'nal.'

B. V. p. 620. *Milton* ſeems to have copied this in the following lines of *Paradiſe Loſt*, which may ſerve as a tranſlation of the above quotation.

" Myſtical danee, which yonder ſtarry ſphere
" Of planets, and of fix'd, in all her wheels
" Reſembles neareſt; mazes intricate,
" Eccentric intervolv'd, yet regular
" Then moſt, when moſt irregular they ſeem."

P. 505. Ἰνδοι, επειδὰν ἔωθεν ἀναϛάντες, προσεύχωνται τον Ἥλιον, ἐκ ὥσπερ ἡμεῖς, τὴν χεῖρα κύσαντες, ἡγεμεσθα ἐυτελῆ ἡμῶν εἶναι ἐυχὴν, ἀλλ' ἐκεῖνοι πρὸς τὴν ἀαλολὴν ϛαντες, Ὀρχήσει τὸν Ἥλιον ἀσπάζονται, σχηματίζοντες ἑαυτὸς σίωπῇ, καὶ μιμέμενοι την χορειαν τῆ Θεῦ. Καὶ τουῦ ἐστιν Ἰνδῶν καὶ ευχη, καὶ χοροι, καὶ Θυσία. Διο δὲ τέτοις ἐλεῦθεραι τὸν Θεῶν δίς, καὶ ἀρχομένης, καὶ δυομένης της ἡμέρας. Αἰθίοπες δὲ γε, καὶ πολεμῶντες σὺν ὀρχήσει αὐτὸ δρωσι Καὶ ἐκ ἂν ἀφίη τὸ ἕλε αἰθιοψ ἀνὴρ εἰ μὴ πρότερον ὀρχήσαιτο, καὶ τῷ σχήματι ἀπειλήσειε, καὶ προεκφοβησέιε τῇ Ὀρχήσει τὸν πολέμιον.

" The *Indians*, as ſoon as they riſe, which is early in the " morning, worſhip the Sun, not as we, who, after having * kiſ-

* *See* Job xxxi. 27.

ſed

Light; by *wheels*, and such like; to shew that the earth, and the celestial orbs were *revolved* and *carried* in their progressive motion by the force of this operation. All which, both the operation itself, and its symbols, God reclaimed to himself by the structure and furniture, and apparatus of the Tabernacle and Temple. Chap. IV.

290. כרכב *Riding*, or *being carried in a circle*. For it is a compound of כר, of which above, and רכב *to ride*, *agitate*, *carry*; to which corresponds φερόμενος, *agitated*, impelled by the Holy Ghost, 2 Pet. i. 21. Hence

292. (294.) בית מרכבת *the Temple of the power that carries the orbs*, represented by a *chariot* drawn by horses, 2 Kings xxiii. 11. whence the chariot of the sun, and *Apollo* driving it, &c. To this refer

רב or רבב a *Jaculator*, *Impeller*, to *dart*, *impel*, *disperse*, a *shower*: whence also a *multitude*, *many*, *excellent*, or *skilled in any workmanship* or *art*; also magnitude, *&c.* It is primarily and properly spoken essentially of the *Divine Persons*. Secondarily, improperly and symbolically of the

" kissed the hand, think we have finished our devotion, but, " standing towards the east, they salute the Sun with *dancing*, " forming themselves in silence to imitate the *dance* of that " God (*i. e.* the Vibration of Light). And this to them is " prayer, chorus, and sacrifice: with which twice every day, " at the rising and setting sun they placate this Diety. The " *Ethiopians* also use *dancing* when they go to battle: and there " is not a man among them will let fly his arrow before he has " *danced* †, and in shew threatened and pre-terrified his enemy " by *dancing*."

And here we may adore the providence of God, in permitting the custom of *dancing* to remain, when its symbolical use was lost, that thence evidence might arise that *it* was once symbolical.

† No more will the modern Hottentots, who are perhaps descended from the *Ethiopians*. See *Kolben*'s Present State of the *Cape*, &c. *Editor*.

Chap. IV. *triune ſubſtance of the heavens* or *air*, the great, powerful, and all-efficient agent in nature. Hence the compound name, (the *Caph* being prefixed)

293. כרב *as a great one*, or *the repreſentative* or *ſimilitude of the Great One*; by which name in the plural, כרבים is primarily and in chief expreſſed the *cherubic* figure of the *Triune Deity*: But as the heathens, by the ſame name and figure, expreſſed the heavens in their trinity of condition, *fire*, *light*, and *ſpirit*, which were not framed to be worſhipped, but to declare the glory of God; upon this account God puts in his claim, and is repreſented by his prophets as preſiding over the heavens, the cherubim, and all the particular hoſts, as Pſal. xviii. 11. 2 Sam. xxii. 11. "He *rode* רכב upon a *cherub* כריב, "and did fly; He came flying upon the wings "of the wind. Pſal. civ. 3. —Who maketh "the *clouds* עבים his *chariots* רכובי; who "walketh upon the wings of the wind, *&c.*

CHAP.

CHAP. V.

SOME Effects and Operations of the Expanſion, or firmament, expreſſed by other words.

נטה. This word is a conſequence of the motion by expanſion, implied in רקע, yet is put in diſtinction to it, and to the force exerted in it. It ſignifies to *decline*, *go any way*, or *every way*, *to go aſide*, or *out of the way*, and *expand*, *ſpread*, or *extend itſelf every way it goes:* For as all is full, every atom is ſo infinitely preſſed, that if leſs preſſed, or leſs reſiſted on one ſide than on another, it is *driven in the weakeſt line.* This comprehends all our modern terms of *gravity*, *attraction*, *centripetal*, *centrifugal*, *lateral preſſure*, *elaſticity*, and ſo forth. Iſa. xlii. 5. Jer. x. 12.—li. 15. Job ix 8. Iſa. xl. 22. Pſal. civ. 2. Iſa. li. 13. Zech. xii. 1. The *Latin* word *NUTO* ſeems to come from this word נטה. 298.

יסד to *compreſs*, and ſo *found*, as the earth was founded by the airs extending themſelves every way within and without the abyſs, at the firſt formation, referred to in two of the texts above, Iſa. li. 13. Zech. xii. 1. *extending* [נוטה the word above] the heavens or air, and יסד founding the earth. Doing the firſt did the ſecond. See Job xxxviii. 3. to 7. Pſal. xxiv. 1, 2, *&c.*—— See p. 4. 299. 301. (302,3.)

מוט as a noun, a *bearer*, or *pole*, or *ſtaff*, to carry things upon between two men's ſhoulders. As a verb, it implies to *remove by force contrary to the preſſure of the expanſion*, or to what they call 303. (306.)

Chap. V. *gravity*; to *diminish* or *destroy the adhesion* of the parts, so that they may slip from, or be dissolved, and consequently by another force be carried against the force of compressure, from one another. At the flood, in despite of this power of the pressure of the firmament, which they thought uncontroulable, God made the parts of the shell of the earth separate from the middle, this way and that way, as Psal. xciv. 1. and after that they were compressed together again, and are kept so. And this is what the texts mean, when they speak under this and other words of the round world's being made so fast that it cannot be *moved*, &c. as Psal. xciii. 1. —— xcvi. 10. Perhaps our word *moth* comes from מוּם.

313. (315.) רוּם *to lift up, exalt, high, exalted*, &c. Hence *Roma, Rome*, had its name. Hence תְּרוּמָה.

רָמַם *to take up, carry upwards*, &c.

רָמָה *to cast, project*, &c. and in honour of this power of the air.

בֵּית הָרָם *the temple of the projecter*, Jos. xiii. 27. And in the Chaldaic termination

הוּרמִין *Hormis, Hermes*, &c. Also the region, from this attribute, called

הוּרמָנִי *Armenia*. Also

314. (315.) הַרמוֹן *God, Lord, Rimmon, Hormin*; by some the *son of night*. Greek, Ἕρμης. There were many places in *Canaan*, and the parts adjacent, named from this attribute and word, and many temples and services to it, as Numb. xxxiii. 10. Neh. xi. 29. Jos. xv. 32. —— xix. 13. Judg. xx. 45, 47. 1 Chron. vii 77. And the king of Syria (*Heb.* אֲרָם the *Aleph* perhaps prefixed to רָמָה, רוֹם, or רִמּוֹן) had a temple to this deity. See Amos iv. 3. where there seems to have been a temple

2 Kings v. 18.

temple or high place to this power *. *Kircher* mentions a naked *Mercury* with a *dog's head*; in his right-hand a ſphere, in his left a caduceus, ſtanding upon a crocodile, encircled with two ſtars, having on his right-ſide *Ammon*, with a *ram's*, on his left *Serapis*, with a *bull's* head; and ſays, That theſe THREE Gods were called ΑΔΕΛΦΟΙ, Brothers, as being together, the chief tutelary Gods of *Egypt*. Chap. V.

N. B. As the *Bull* is the emblem of *fire*, the *Ram* muſt be here the hieroglyphic of *light*, and the *Dog*, of the *ſpirit*.

In the Chaldee we have

מרקלים *Marcolis*, for *Marcoris*, the ל put for the ר, after the Chaldean manner. It is the ſtatue or idol of *Mercury*, which was made by erecting two great ſtones, one here, one there, and laying the third along over the two uprights, in ſuch a manner that its two ends ſhould touch and cover both the other ſtones. Such as theſe were alſo uſed for land-marks or boundaries, as was ſometimes the figure of a *Mercury*, as commonly painted, with wings at his cap and feet. Theſe they called *lapides terminales*, *term-ſtones*, or ſimply *termini*, *terms*: They had at laſt a God called *Terminus*, and *Terminalia*, *term-feaſts*.—— Are not all theſe things derived from this word, which, with a ת prefixed, founds תרם *term*? † 315. (316.)

* The LXX. tranſlate the latter part of Amos iv. 3. — Ἀποῤῥιφήσεσθε εἰς τὸ Ὄρος τὸ Ρομμάν.

† The times appointed for the judges to *determine* and *ſettle differences* and *bounds* between man and man.——And thoſe ſet apart for *exerciſes* and *degrees* in the univerſities are hence called TERMS: One of which is called DETERMINING, (viz.) to DETERMINE, *Bachelor of Arts*. And they all fall under the idea of this *attribute* of the *Air*, which determines and ſettles all the differences and bounds in the natural œconomy, and gives degrees, &c. to every thing.

There

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There was a religious rite and cuſtom of *caſting* or *projecting* ſtones into heaps, to theſe three ſtones above-mentioned, thereby attributing this power of *projection* the heavens: whence the Talmudiſts ſay, "that he who caſts "a ſtone to *Marcolis*, is guilty of idolatry, be- "cauſe this action is his worſhip." And Rabbi *Solomon* ſays, "they worſhipped him by caſting "ſtones." And it is more than probable that thoſe prodigious and remarkable monuments of antient idolatry at this day remaining in *England*, called *Stone-henge*, and *Rolle-Rick-Stones*, and others of the ſame kind, were the works of our Pagan anceſtors, in honour of this attribute of the heavens or air. And perhaps from hence God appointed idolatry to be puniſhed by *ſtoning* by all the people, not only that the offender might ſuffer this kind of death, but that, from ſuch numbers throwing at him, an heap might be raiſed as a monument of his crime, and a recognition of this attribute to God. To this refers

315. (316.) רגם *to caſt* or *project ſtones.* And ſundry authors conſtrue Prov. xxvi. 8. as relating to this cuſtom: "As he that putteth, or ſlingeth, a ſtone "into במרגמה the heap [namely of *Mercury*] "ſo is he that giveth honour to a fool." And indeed the parts of the compariſon tally better this way than in our *Engliſh* tranſlation: "He "that bindeth a ſtone in a ſling," which ſeems to have no connection with the latter part of the proverb.

As this power in the air puſhes, impels, and makes things fly upward and downward, and every way to expreſs this, *Mercury* was painted with wings at his head and feet. There was a Temple to him under this attribute:

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317. (319.)

רמן or בית רמון *the Temple of the projector* or *impeller*, as mentioned above, 2 Kings v. 18. This was in *Syria*, which in *Hebrew* is ארם, and perhaps, as hinted above, had its name from this attribute. There were several places to which this attribute was joined, *Rama* רמה, in the tribe of *Judah*, was named from it, mentioned Jer. xxxi. 15. Esd. ii. 26. Neh. vii. 30.——xi. 33. This was reclaimed to God by the same word, by the miracles in *Egypt*, where the *lifting up* of *Moses*'s rod, the emblem of irradiation, is expressed by this word, Exod. vii. 20, *&c.*— So 2 Kings ii. 13. so Psal. lvii. 6, 12. and lxviii. 19. and 1 Sam. ii. 10. where the exaltation of Christ is predicted, and throughout the Psalms. The *Anakim*, and *Emim*, and *Horim* (ענקים, and אמים and החרים) seem to have been worshippers of this attribute, whence they had the name of עם רם, Deut. i. 28.——ii. 10, 21.—— ix. 2. They sacrificed to these powers on high places, called, upon that account, by this name, הרמים, החרים, Deut. xii. 2. as did also the apostate *Jews*, as appears from Ezek. xvi. 24, 25, 39.——xx. 28. joined with במות, &c.—— And Ezek. xvii. 22. *& seq.* Christ is predicted as a top-branch of הארז הרמה an high cedar, to be planted בהר מרום in the mountain of the height of *Israel*. This attribute was also reclaimed, by sacrifices appointed to be brought to the Temple of God, called תרומות, rendered *heave-offerings* of their hand. This power had also for its symbol the *pomegranate*, called therefore by the same name. And upon this account, Exod. xxviii. 33, &c. the Jews were ordered to make figures of the *pomegranate* in blue, purple, and scarlet, and hang them upon the skirts of *Aaron*'s garment. And 1 Kings vii. 18. they were ordered

to

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to be placed upon the columns, which were repreſentatives of the columns of the light and ſpirit, and which ſupported the ſpheres, the ſymbols of the courſes of the orbs: Some ſtone was one of its ſymbols, and called by the ſame name, which is rendered *Coral*, but perhaps is *that* from which *Mercury* is extracted.

N.B. Quick-ſilver, like the ſpirit, is formed into globules, or grains, which, by their ſize, compreſs, and become the inſtrument of weight and impulſe: As the *ſpirit* is ground into *light* by the action of the ſolar fire, or here by friction, or otherwiſe; ſo *Mercury*, by chemical fire, friction, or ſuch like means, is divided into the ſmalleſt particles, innumerable, and inviſible even to the fineſt glaſſes; ſo that the leaſt heat or action puts it into motion, as is evident from its aſcent in glaſs tubes, as the thermometer, &c. and like light, it can paſs eaſily into the ſmalleſt fibres and capillary tubes, and be incorporated or intimately mixed with any body or kind of matter: ſo that in theſe, and many more particulars which might be enumerated, it very aptly repreſents the *power of the air* under conſideration.

We may refer hither the Chaldee

320. דחה to *impell*, *expell*, *propell*, &c.

(323.) See p. 25. אידחה אבן a *ſtone impelled*, or carried by impulſe.

דיחוי, דחיה *depulſion*, *propulſion*, *impulſion*.

דחית האויר *propulſion*, or *impulſe of the air*.

And alſo

325. (327.) יצק (of which above, p. 27.) *to pour out*, *put into fuſion*. So Job xxviii. 2. אבן יצוק *molten ſtone*, ſtone whoſe parts were diſſolved and put into fuſion

fusion (at the deluge) driven together, and adhering by compression (at the reformation) by the expansive force of the firmament, in the same manner as the parts molten storken or adhere by the act of the same agent. Chap. V.

The compression of the earth between the two opposite columns of light and darkness is attributed to God (Jehovah) under this word, called מצקי ארץ *the compressors of the earth*. And hence among the Canaanites 1 Sam. ii. 8.

בית מעכה *the temple of the compressor*, dedicated to this operation of the heavens or air. We may also refer hither 2 Sam. xx. 14.

צור or יצר (of which above) *to compress*, and *keep bodies together compressed in their figures and forms*, &c. As a noun or name, it is an agent, the *plasmator*, and *binder of the atoms*, so the *former*, and *preserver* of all *bodies*, *forms*, *textures*, and the *powers* in them: It is an *attribute* of the heavens or air, the deity of the heathens, to which they had several temples, called בית צור *the temple of the plasmator*, &c. as Jos. xv. 58. 2 Chron. xi. 7. Neh. iii. 16. and 1 Macc. iv. 61. βαιθσὺρα. This attribute gives name to a nation and people, Psal. lxxxiii. 8. whence *Syria* and the *Syrians* were named——to several places, Jos. xix. 29. Isa. xxiii. 1.——to several persons, Numb. xxv. 15.—xxxi. 8. Jos. xiii. 21. 1 Chron. viii. 30. —ix. 36. sometimes joined with other words, as Numb. iii. 35. צוריאל. Numb. i. 6. צורישדי. A *cord*, or what *binds* things, was one of its emblems, and so found in an ark of the heathens, with other emblems, as *rods* of their sacred trees, *wool* of their sacred rams, &c. as mentioned by Dr. *Spencer* from *Clem. Alex.* p. 754. But the chief emblem was a *rock*, called צור, and which Confer. p. 26.

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this power of the air gives firmneſs and ſtrength to, by *compreſſing* its conſtituent parts cloſe, and keeping them *hard bound* together, ſo proper to protect thoſe bound and fenced about with rocks, forts, walls, towers. This was a very high emblem, and had great regard paid to it, even to the laſt; being looked upon as an aſylum or protection to thoſe that ſought it: As *Homer*'s Iliad 22. v. 126. where *Hector*, upon the ſight of *Achilles*, deliberates with himſelf what to do, whether he ſhould go to him unarmed, and offer terms of peace, with large conceſſions, but checks himſelf with theſe words; "There "is no talking with *Achilles* ἀπὸ δρυὸς ἠδ' ἀπὸ Πέ-"τρης, from an oak, or from a *rock*, as a young "man and a maiden converſe together," that is, ſafely, without danger, hoſtilities being ſuſpended. And there is an odd *Remain* of this cuſtom ſubſiſting yet in the North, where the colliers enter into an agreement or covenant among themſelves, by laying their hands and ſpitting upon a great *ſtone*; and this they look upon as binding, as laying the hand upon the Bible, can be to their ſuperiors: And in the *Iſle of Man*, as I am informed, it is the cuſtom to ſerve law-proceſſes with a blue *ſtone* inſtead of a writ.

When this word is applied to God, it is tranſlated *Rock*, though not always properly: for as the heathens attributed all power to the material agents, the *air*, not as his creature, agents or legates, but as uncreated, independent, and the *powers* not as mechanical, but eſſential; ſo the inſpired writers were to attribute every thing, action, and power to God; and therefore this word צור ought to be rendered, *whatever thing*, or *action*, or *&c.* is intended by the context to be reclaimed from this mechanical

power

power of the air, or *what* its worſhippers in imagination attributed to it; as Deut. xxxii. 4, 30, 31, 37. where it is applied to God as *creator*, *former*, and *plaſmator* of theſe powers, and whereby he reclaims the inherent power in his eſſence of performing any or all of the actions falſly attributed by the heathens to their *Gods*, their *Rocks*, as they called them, and of communicating it to theſe *agents* by mechaniſm, and from thence to walls, rocks, men, &c. or of ſuſpending and withdrawing it, and ſo controuling their mechaniſm by a beck, a nod, or a word ſpoken at his command by God's miniſters, as when he made the walls of Jericho, at the ſignal of a ſhout, to fall down flat—which was making the air, upon which its worſhippers depended for the communicated firmneſs of their walls, by the ſmall degree of motion given to it by the breath of their enemies, act againſt them, and demoliſh their bulwarks, their rock of defence. *Strength*, *deliverance*, *ſalvation*, is attributed to God, as the *author* and *giver*, under this word, in oppoſition to the mechanical and communicated or imaginary ſtrength, &c. in the heavens the air. Jehovah is צור עולמים, the צור of Iſrael, and that *Rock* was Chriſt: upon this rock is the church built, and not upon *Peter*; for there is no *Rock* beſide *God*. The *oak* and a *ſtone* was the emblem of the ſame *power*, and had reference to the covenant of grace: So this word צור has, and perhaps it may intimate that God was *bound* to do for the ſoul and body of man, both here and hereafter, whatever was implied in this word and its derivatives. "Joſhua made a *covenant* with the people—and "took a great *ſtone*, and ſet it up there under "an *oak* that was by the *ſanctuary of Jehovah*, "and ſaid unto the people, Behold, this *ſtone* ſhall

Chap. V.

Joſ. vi. 20.

Iſa. xxvi. 4.

1 Cor. x. 4.

Iſa. xliv. 8.

Cha. xxv. 25, 26, 27.

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" be a witneſs unto us: for it hath heard all the " words of the Lord, which he ſpake unto us: " it ſhall be there for a witneſs unto you, leſt " you deny your Elahim." And there is an antient heathen teſtimony in *Livy* and *Dio*, of a ſpeech of like nature made to an oak, calling it to witneſs —" *Hæc ſacrata *quercus* et quic- " quid deorum eſt, audiant fœdus a vobis rup- " tum." *Moſes* upbraids the *Jews* with ſerving *ſtrange Gods*, *theſe powers of the air*, and forgetting the צור that begat them. And *Jeremiah*, (chap ii. 27.) reproaches them with ſaying to " a ſtock (עץ) thou art my father, and to a " ſtone, thou haſt brought me forth." And from hence we may underſtand the reaſon why *Heſiod*, in his *Theogony*, propoſing to ſing of the immortal Gods, makes mention of an *oak* and of a *rock*. Theog. v. 35.

B. 3.

See Corol. Paſch. Coron. *p.* 496.

Deut. xxxii. 17, 18.

Ἀλλὰ τίη μοι ταῦτα περὶ δρῦν ἢ περὶ πέτρην.

" Sed quo mihi hæc circa *quercum* aut circa *Petrum*."

And alſo, whence the notion of men being born of *oaks* and *rocks* took its riſe, by taking ſymbolical for real expreſſions; to which *Homer* ſeems to allude, Odyſſey 20. v. 163.

Οὐ γαρ ἀπὸ δρυὸς ἔσσι παλαιφάτε, οὐδ' ἀπὸ πέτρης.

" Non enim a quercu es olim dicto, neque a *petrâ*."

* So Virg. Æn. IX. v. 448.——*Capitole immobile Saxum.*

CHAP.

CHAP. VI.

THUS far of the LIGHT chiefly, either ſeparately conſidered, or in conjunction, as mixed with the Spirit. We come now to treat of the FIRE at the orb of the Sun, the *Third* part or condition of the matter of the heavens or air, according to the order of Mr. *H*'s diſquiſitions, but in the nature of things the *Firſt*.

מארת a *candleſtick*, *chandelier*, *ſomething to ſupport*, *make*, or *hold light*. It is not *plural*, but *ſingular*. But, like its ſymbol, the *candleſtick of gold* in the Moſaic Tabernacle, it includes the ſix branches, the planets, which make parts of this candleſtick, and receive their fluxes of light reſpectively from the action of fire in the orb of the ſun, as the oil ſeems to have been conveyed by conduits in the branches of the golden candleſtick from the center, which repreſented the orb of the ſun, to lamps in the branches, which repreſented the planets*. But then it muſt be remembered, that this word מארת *marth* ſignifies only a *candleſtick*, the *frame* of orbs, which had no fire in its conſtituent parts, no more than there is in a piece of iron, or a burning-glaſs, or in the golden candleſtick before the lamps were placed in it and lighted. God ſupported the action of fire in the open air by his immediate power the firſt three days, as he afterwards did 354. (356.)

* There is a *Planetary* deſcribed by *Valerius Flaccus*, Arg. 5. v. 416. which he makes ſerve as a *luſtre* in the *temple* of *Phœbus*. See *Spence*'s *Polymetis*, p. 180.

by

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by miracle in the wilderneſs to reclaim this, and ſhew them that matter in this operation was not a God, but God's creature, and at his beck, to aſſiſt his ſervants and annoy his enemies; that there were no *properties* in ſolids to create and ſend forth light——that it was no part of the fuel; and that matter was not infinitely diviſible, and infinitely extendible; nor that the orb of the ſun could ſend out parts of its own body in light for ages, and yet that body be not a jot diminiſhed, nor the ſpaces into which theſe parts of his body are thus every moment for ages ſent, a jot the fuller, but continue, for all this, *empty ſpace*, and a vacuum.——On the fourth day the expanſion or firmament, by the Almighty Fiat, formed the matter of theſe orbs into *marth*, an *order* or *frame of orbs*, a *candleſtick* with branches, knops, &c. and then the fire was placed and burned in the orb of the ſun, whoſe ſubſtance was fitted to that purpoſe; ſo the *marth* became לאתת for an *athth*, an *action of fire*; and as the light muſt neceſſarily flow in ſtreams from the *athth*, being preſſed out by the ſpirit coming in, and hit the earth, and illuminate it differently in different parts of its daily and annual rotation, by which it completes its orbit round the ſun, ſo it was למועדים *for ſeaſons*, ולימים *and for days*, ושנים *and years*: and as the end of thoſe ſtreams of light would neceſſarily ſtop againſt any ſolid body it met with in its journey, be diverted, and turned off in another direction; by this means the light from the *athth* of the ſun reached the moon and ſtars, and from them was reflected; and ſo they became as in the 15th verſe of *Gen.* chap. i.

מאורת *Maorth*, a *chandelier*, a *candleſtick*, with the lamps lighted, ſo *giving light*. *Marh*, as obſerved above, is only a chandelier, the frame of

of orbs: *Maorth* is more, that chandelier *performing* what it was made for, or sending out its lights; the ו *Vau* in the second order, according to the rules of Grammar, implying *action*. In like manner *Moses* uses מאר for the chandelier or golden candlestick before the lamps were lighted, and מאור after they were lighted, Exod. xxv. 6. שמן למאר *oil for the use of the candlestick*, Numb. iv. 9. מנרת המאור *the candlestick of the light*, or *the instrument for a flux of light*. So ver. 16. שמן המאור *oil of or for the light*, or *for the instrument to send out light*. So מנרת, the *Mem* prefixed, is the word for the whole candlestick, and נרתי, without the *Mem*, is used for the branches. Chap. VI

359. (361.) ממארת the *acting marth*, used Levit. xiii. 51, 52. —xiv. 44. for the *action* or *burning heat* of the leprosy, rendered *corroding*, *fretting*, *persevering*, LXX. εμμονος, a *confirmed leprosy*, as we say; where the idea is preserved the same, for the *marth* of the sun was to be a place where the fire or light was to burn, *a place of burning* issued out into several spots: so the word is properly, and conformably to the idea, applied to the leprosy when it is arrived at that height as to break out into spots, and to have made itself a *marth* or *place to act in*. The first *Mem* may perhaps be a preposition, and Lev. xiii. 52. צרעת ממארת הוא may be construed *a leprosy from a marth, a station, or acting place, this*; that is, it has got ground, or a stage to act in and diffuse itself from, all-around; which is calling it a confirmed leprosy, as the context makes it to be.

את־מאור הגדל *the acting substance of the greater or more powerful flux of light*; that is, the flux of light from the *aththh* of the sun, which hits, strikes and acts upon the earth, and thereby has dominion

Chap. VI. nion of the light hemiſphere, called Day, ſo rules the day, and in the day, &c.

את־מאור הקטן *the acting ſubſtance of the leſſer, minor, inferior flux of light*, that is, of the *moon*, not only as leſs in quantity, but as it has nothing of its own, but is put under the government of a major, receives its light, and ſo power and rule from the ſun the great light. Pſal. lxxiv. 16. this word מאור is put in oppoſition to שמש, —— "Thou haſt machined (הכינות) מאור ושמש." This refers to the precept, Gen. i. 3. יהי אור ויהי אור, "*Let there be Aur, and there was Aur.*" And the machinating of this operation, which produced at firſt a flux of light without the natural cauſe, is here attributed to God, as an Act precedent, and preparatory to the manner in which he infuſed theſe powers into the eſtabliſhed machine *. So מאור is

* Dr. *Dickenſon*, in his *Phyſica Vetus & Nova*, treating of the light which exiſted before the Sun, has theſe words, p. 213. *Quo bene conſiderato facile concipiamus lucis iſtius rationem, quam Moſes triduo ante ſolem factum memorat: Ipſe namque ſubtiliſſimorum corpuſculorum celer & pernix motus, atque actio quæ ſuſcitabat ignem; ſimul & eadem opera* lucem *fundebat. Quippe quia lux non eſt aliud (ut ſentiunt optimi philoſophi) niſi* diſpanſus & attenuatus ignis: *Quam* Plato την του πυρος εκχυσιν *ignis effluxionem vel* φλογα απορρεουσαν *flammam effluentem vocat. Qualis erat illa quam primigeniam dicunt. Hanc igitur* Empedocles *(quem vetuſtiſſimæ traditiones illuminarunt)* ηλιον αρχετυπον, i. e. *ſolem originalem vocabat; ipſamque doctiſſimus & elegantiſſimus* Nazianzenus αυηλιον φωτα, i. e. *Lucem ſine ſole productam nuncupavit.* The ſenſe of which is, "That we may eaſily conceive the reaſon of that light which *Moſes* mentions to have exiſted three days before the Sun; for the rapid and continued motion of the moſt ſubtile corpuſcles, at the ſame time and by the ſame action that kindled fire, iſſued *light*: For *light* is nothing elſe, as the beſt philoſophers agree, but *diſpanded* and *attenuated fire*, which *Plato* calls the *effluxion of fire*. And ſuch was this light, which they call primogenial. *Empedocles* from tradition calls it the *archetypal Sun*; and *Nazianzen*, *Light produced without the Sun.*

And

is the *action*, *instrument*, or *means* of light, which existed before the שמש, now acts elsewhere in the streams of light from the stars, &c. which are called מאורי אור, and also forms those streams; and שמש is the whole stream or flux from the sun on every side to the extremities, and includes מאור; though it did not particularly or formally exist till after the light was conglobated, and the action of fire transferred to the globe of the sun. Chap. VI

אר is to *flow*—אור—*that which flows*, light in general.—* מארת *the candlestick* or *inactive frame*—מאורת *the candle burning*—מאור *the result of spirit and fire acting on or in the* מארת; which action, for the three first days, was supernaturally supported by the immediate finger of God, without the מארת, which was not made till the fourth day, when the action of fire was placed in it. So in Ezek. xxxii. 8. כל מאורי אור, all the *Mauri aur*, streams of light, are all the actions of light in the heavens, all the orbs on which the agents act, and from whence light is made

And cardinal *Cajetan* has a good note upon the 14th verse of the first chapter of *Genesis*. "The first day the light is considered by itself, without taking into consideration its division or "diffusion into the bodies of the sun, moon, and stars. I say, "its division or diffusion; because we are uncertain whether "the stars are of themselves luminous, or receive their light "from the Sun. On the fourth day the very same light is considered as divided, and conglobated into many distinct luminaries and stars.

* From the *Hebrew* מארת, perhaps comes the *English* word MART, an Emporium, whether merchandise is brought in from all parts, in order to be exchanged and sent out to all parts. And from מאור MAUR, may come the *Latin* MAURUS, and the *English* word MOOR. *Empedocles* calls the Sun πυρος Αθροισμα μεγα. *a great Collection or* MART *of fire*. See *Laertius* in his Life.

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to flow in ſtreams to us. And ſo מאור is part of the אור, light in general; as are the waters, part of the ſea, and hoſts, part of the heavens, and light, part of הכוכבים; and as Pſal. cxlviii. 3. we meet with הכוכבי אור; and Ezek. xxxii. 7. "the ירח ſhall not give her light." [אור]. And as it is no impropriety to ſay, the light of ירח *Irh*, though the ירח *Irh* is a ſtream of light; ſo the ירח and other lights may thus be called מאורי אור, as they are parts or ſtreams of מאור. To illuſtrate this by example, let the apparatus for electrical experiments, when all is in order for action, but not yet in action, be מארת, the *Mart* — when it is put in action, by the turning round of the glaſs-ſpheroid, &c. 'tis מאורת — each ſtream of irradiated air, or electrical virtue, as they call it, is מאור, which may be divided into the greater and leſſer *Maor*, and the principal or whole ſtream that comes immediately from the glaſs-ſpheroid, by which the chief of the experiments are performed, is the שמש, which enlightens and turns little glaſs-globes, and acts in miniature the part of its principal, the real *Shemoſh*.

357. (359.) נהר *to flow*, *flow out*, &c. the condition of light firſt and primarily; afterwards applied to water, which is kept fluid by the agency of the light. Thence

נור *fire* or *light*. And

358. (359.) מנור *an inſtrument for light to flow from*, or to make light flow.

360 (362.) ארת or נרת the very *focus*, or *theca ſolis*, the *ſolar mill*, whether the *grains* are ſent to grind, and whence the *ſpirit* is ſent out in light, from ארה a ſtation (*viz.*) of fire or light.

אור and ארר *execrated, execrabile, execration, accurſed*; namely, from the fire at the orb of the ſun, being the firſt object of falſe worſhip. This was the firſt crime; this was the cauſe of the fall, which brought the *fire*, the *wrath* of God upon man, which muſt have immediately conſumed him, had not Chriſt become his *Surety*, to ſuffer it in his ſtead; ſo became *accurſed*, *a curſe for us*, ארור, and אלוה. This was the *fire ſtolen from heaven*, which opened the * *Box of Pandora*. (פן־דור) Whence——

Macies & nova febrium,
Terris incubuit cohors:

* There is a remarkable paſſage in *Heſiod* concerning *Pandora* and her box, which, though more properly belonging to another place, I cannot help citing here.

Πριν μεν γαρ ζωεσκον επι χθονι φυλ' ανθρωπων
Νοσφιν ατερ τε κακων, κ) ατερ χαλεποιο πονοιο,
Νεσων τ'αργαλεων, αιτ' ανδρασι γηρας εδωκαν.
Αιψα γαρ εν κακοτκτι βροτοι καταγηρασκουσιν.
Αλλα γυνη χειρεσσι πιθω μεγα πωμ' αφελουσα
Εσχεδασ', ανθρωποισι δ' εμησατο κηδεα λυγρα.
Μουνη δ'αυτοθι Ελπις εν αρρηκτοισι δομοισιν
Ενδον εμιμνε, πιθω υπο χειλεσιν, ουδε θυραζε
Εξεπτη· προσθεν γαρ επεμβαλε πωμα πιθοιο,
Αιγιοχω βουλησι Διος νεφεληγερεταο.

Heſ. Εργ. κ) Ημ. l. 90.

Mankind, at firſt, a bliſsful earth enjoy'd,
Of ev'ry ill, and ev'ry labour void:
Sickneſs nor age annoy'd their happy years;
But ſoon, alas! a ſad reverſe appears.
For in a fatal hour, with her raſh hand,
The woman op'd the box, out ruſh'd a band
Of ev'ry ill of life, with haſty pace,
Diſperſing miſery o'er all her race.
HOPE only did within the caſket ſtay,
The lid put down, before ſhe wing'd her way.
For thus the will of Jove did pre-ordain
This cordial drop of comfort to detain.

Strip this of its allegorical dreſs, and what is it but an account of the *fall*, and the hope of deliverance from its conſequences, by the promiſe of the Redeemer.

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Semotique prius tarda neceſſitas
Lethi corripuit gradum.
Hor. Lib. I. Ode III. ver. 29, &c.

370, & ſeq. (372, & ſeq.) אתה *to move, a mover, to bring, a bringer forth,* &c. The word is uſed to expreſs force, ſtrength, agility, the power of action in the perſon or thing of moving itſelf or other things, or in employing what is under its command, &c. And as in material things, this power is moſtly or chiefly by the action of *fire*, hence

*אתת *the aihth, the fire acting in the orb of the ſun.* This is the primary ſenſe, the root, and thence 'tis branched out into leſſer branches, as Job xii. 19. where 'tis uſed for *mighty men*; ſo for an *aſs*, whoſe employment was to *bring* or

* *Lucretius*, explaining how the Sun (which he makes no bigger than it appears) can ſend out ſuch a profuſion of light and heat, ſays, It is fed with ſupplies from all parts of the univerſe, which are collected in its body as into a ſpring, and flow from thence in ſtreams of light and heat——and it has many *dark* and unſeen ſtores of fire about it, which, though diſtinguiſhed by no outward brightneſs, may yet increaſe the heat of its rays, &c. *Lib.* 5. *v* 592.

Illud item non eſt mirandum quâ ratione
Tantulus ille queat tantum ſol mittere lumen.
Quod mare, ac terras omneis, cœlumque rigando
Compleat, & calido perfundat cuncta vapore.
Nam licet hinc mundi patefactum totius unum
Largi fluum fontem ſcatere, atque erumpere flumen
Ex omni mundo, quò ſic elementa vaporis
Undique conveniunt, & ſic conjectus eorum
Conſtuit, ex uno capite hic ut profluat ardor:
Nonne vides etiam quam latè parvus aquaï
Prata riget fons interdum, campiſque redundet?
Eſt etiam quique uti non magno ſolis ab igni
Aëra percipiat calidis fervoribus ardor;
Opportunus ita eſt ſi forte, & ideneus aer
Ut queat accendi parvis ardoribus ictus. ——
Forſitan & roſea ſol alte lampade lucens
Poſſideat multum cæcis fervoribus ignem
Circum ſe, nullo qui ſit fulgere notatus,
Æſtifrum ut tantum radiorum exaugeat ictum.

carry

carry things; so in Chaldee for a *woman*, a *wife*, who *brought forth*, thence applied to that *power* which can bring to pass future events; retaining still the sameness of idea, and the savour and virtue of the root, from whence the strength and nourishment is drawn and communicated to all the branches. So Chap. VI.

אות, the participle present, *something coming*, a *sign*, or *indication*, or *prognostic* of some future event, a mark, token, *symbolum*, &c.

אתון Dan. iii. 17. is used for the *burning firey furnace*; and hence comes ATHANOR, a *furnace*, so called by the chemists: hence also the Greek ἄιθω, to *burn*, Αἰθὴρ, *Æther*, Αθως, *Athos*, a *thunder-struck mountain*, Αθηνη, *Minerva*, the daughter of *Jupiter*, which physically taken, is the *fire* springing out of the sun, and going thence in *light* *. Ατις, or Αιτις, *Atis*, *Attis*, the *Sun*, the *celestial fire* or light, the same as *Osiris*, and *Adonis*, *Serapis*, *Mithras*, *Ammon*, &c. whence in an antient altar at *Rome* there is this inscription——

"Attique excelso quem nihil orbe fugit."

So καρποφόρος *frugifer attis*, φωσφόρος, *lucem proferens atis*. Ατη, a *goddess*, or *demon* of *misfortunes*, *wrath*, *fury*; others make her beneficent. See *Homer*, Iliad xix. ver. 91, to 132. Hence also

אתן *strong*. אותנטיאה, Chald. and Αυθεντια Greek, *authority*, *power*, *dominion*: hence the seventh 380. (383.)

* Agreeable to this, *Virgil* makes *Sinon* feign the wooden horse to be dedicated to *Minerva* or *Athene*, an horse being an emblem of the solar light: So two serpents, αγγιλοι φωϑ, destroy *Laocoon* and her sons, for the affront done to her, by throwing his spear and violating the sacred wood: And after this the serpents make their way to the tower of *Athene*, and lie at the feet of her image. See *Virg. Æn.* 2,

month

Chap. VI. month of the *Jews* had its name תאתנים. In the Arabic the word אתה or אתי ſignifies *coition*, and אתון is a *furnace*, and *hearth* where *fire is kindled and burning:* alſo a *place* where any thing is *bred* or *formed*, as the *womb*, from the reſemblance it has with a furnace as to its ſhape, &c.

375. (378.) *שבל, whence *Cybele:* The word is a compound of שב, a *ſpark*, *flame*, *particle* of *fire*, and בל *mixture*, *ſpirit*, &c. ſo is the *mixture of the light and ſpirit*; and as this *mixture* שבל, is the cauſe of all the operations of nature, hence *Cybele* is called the Mother of the Gods. Hither we may refer

370. (372.) בית־לבאות the *houſe* or *temple of lions*; becauſe the lion was the ſymbol of the light iſſuing from the *aththh* of the Sun; whence under the name of the ſymbol, the thing ſignified (*viz.* the ſolar light and heat) was worſhipped. Alſo בית־לבב *the temple of the heart*, i. e. *the Sun*; for they called the orb of the ſun the *heart of the world*, not only upon account of its being placed in the middle of the univerſe, as the heart is in the middle of the body, and of its *puſing* out light to the extremities of this ſyſtem, as the heart does blood to every part of the body, and by a continual circulation of the light and ſpirit keeps a going and preſerves the mundane œconomy and frame, as the circulation of the blood and fluids does the animal frame, the microcoſm; but alſo becauſe they fooliſhly imagined that it was indued with the higheſt intelligence and wiſ-

* A MS. remark of Mr. *H———n* himſelf on this account of שבל runs thus; "All that about שבל, is a miſtake of "*Caſtell*, and my compoſition is ſo too: 'tis but the channel "waters flow in." *Editor.*

dom,

dom, and able to communicate those gifts to its worshippers. Chap. VI.

יקד or וקד to *kindle*, *burn*, *melt*, *dissolve* the grains into atoms, so make a *Vacuum*; and hence indeed comes the word *Vacuum*, as well as the thing: For as the grains are melted to atoms, the compression of the expansion forces them to give way, or make room for more spirit, or any thing grosser, to come in, as if the place was void: And our philosophers will never find any other Vacuum but where this action of fire is, or where the small parts or atoms are interrupted by the other orbs; as the earth for instance, or where they are by other means separated from the spirit; and, in this case, the next grosser air or spirit *rushes* in, (as the word רוח sounds) and drives any body in its way along with it; which effect is termed *gravity* and *attraction*, but in reality is caused by the attenuation and pressure of the air; that is, by the impulse of the gross unattenuated air behind being greater than the resistance of the attenuated air before. 382. (385.)

חמם *heat*, *the action of burning*, *fury*, &c. as a verb *to heat*, *make hot*, *burn*, to *copulate*, *conceive*, &c. Hence חמה *the action of fire at the orb of the sun*; and חמן and חמנים *sun-images* *, set 383. (385.)

* *Heliodorus*, in the 9th book of his *Ethiopic History*, mentions such an *Usage* among the *Ethiopians*, whose heads were adorned with a kind of turban stuck round with arrows, some pointed inward and others outward, to represent rays. And *Vossius*, in his *Christian Physiology*, book 9. p. 268. says, that the Sun was figured in an human and juvenile form, having his head surrounded with rays; and cites *Ovid*'s *Fasti*, 1*st*.

——*Radiis Hyperiona cinctum.*
Hyperion crown'd with rays.

See also *Ovid's Metamorph.* book 2. ver. 124.

Im-

Chap. VI. up by its worſhippers to repreſent the Sun, with arrows pointed outward, to expreſs the efflux of the *light*, and others pointed inward, to ſignify the influx of the *ſpirit:* Alſo a *Solary*, an image of *Hammon*, or *Jove*, placed in an open place that receives the heat of the ſun: Alſo the *Temple* of *Hammon*, which others call the ſolar or ſun-furnace, *Heliocaminus*. Indeed καμινος and *caminus* may come from חמן, the ח being pronounced as *k*, and *c*; and the Greek and Latin termination *os*, and *us*, poſtfixed. See Iſa. lvii. 5. Lev. xxvi. 30. 2 Chron. xiv. 4.——xxxiv. 4, 7. Iſa. xvii. 8.—xxvii. 9. Ezek. vi. 4, 6.——Alſo *a ring-dove*, *pigeon*, *ſtock-dove*, its ſymbol. Hence

חמץ to *ferment*, *leaven*, from חם to *heat*, and מץ *dough*, unleavened, pure meal and water.

יונא a *dove*, *turtle*, the ſymbol of the *ſpirit* returning into the ſolar orb; among the Aſſyrians and Babylonians, Hoſ. xi. 11.

צוחוב the golden brightneſs about the neck of turtles or pigeons, a ſymbol of the fire and light.

חרר חרה to *burn*, &c. *combuſtion*, *ſummer*, with its derivatives, a Noun plural. Illuſtrious perſonages; heroes, whoſe robes and dreſs were *white*, the emblem of light, and enſign of royalty, Eccleſ. x. 17. Neh. iv. 19.——v. 7. Iſa. xxxiv. 12. Neh. vi. 17. Alſo the *focus* or *hearth* where *fire* is burning: *to bake cakes upon the embers.*—— Some animal ſuppoſed to be

Impoſuitque comæ radios.
He put *rays* on his hair.
So ver. 40.
—— *At genitor circum caput omne micantes*
Depoſuit radios.
His father (Phœbus) put off the glittering rays of light which ſurrounded his head.

pro-

produced from a ſerpent and a toad—Some kind of *ſnake*; Arabic, *a ſerpent rolled up in a circle*; a kind of *ſparrow*. All which animals are to be looked on as ſymbols of the *ſolar fire*. Hence Chap. VI.

בית חרון the *temple of the burner*.

חרון אף the *fiery viſage*, i. e. the athth of the ſun; the *hot anger of God or Man*. The idea is taken from the action of fire in the ſolar orb.

חרס another name for the *ſolar focus*, or *fire*; written alſo חרש. See Jud. viii. 13.—xiv. 18. Job ix. 7. Jer. xix. 2. Deut. xxviii. 27. Job ii. 8, &c. 389. (393.)

תמונת חרס the *ſimilitude* or *figure of the ſolar fire*; the *ſun-image*, pictured with bright or gilded rays or arrows pointed outward or from the center of the ſun, and dark rays pointed inward or towards the center of the ſun, which on every ſide paſs between one another; repreſenting the fire at the center, or in the pores of the orb, the *ſpirit* coming in, in the dark rays, and the light going out in the bright rays: theſe two ſorts of rays were the *Baal* and *Aſhteroth* of the ſacred Scriptures, the two chief powers, with the addition of the hoſt of heaven, which the natives of *Canaan*, and the ſeduced *Jews*, are, in groſs, ſaid to have ſerved. A city was called *Timnath-Heres*, Judg. ii. 8. and ſimply *Timnath*, Judg. xiv. 1. So alſo

עיר החרס Iſa. xix. 18. *Heliopolis*, the *city of the ſun*, which is called בית שמש *Bethſhemoſh*, Jer. xliii. 13. where there is the temple of the ſun; and the *Egyptians* hold yearly conventions in honour of the Sun, with ſacrifices; the ſtudy of aſtronomy flouriſhes, and there are ſchools for all arts and ſciences. According to *Plutarch*

Chap. VI. in the life of *Artaxerxes*, the ſun is called by the the *Perſians* Κῦρος, כורש *Cyrus*, from this word חרס.

389. (393.) חרח *a kind of bitter herb ſacred to the ſun*, uſed formerly in the feaſt of the Paſſover, to acknowledge, by way of retribution, God the creator of the *ſun*, and attribute all its operations and effects to him.

395. דלק to *burn*, *conſume*; *combuſtion*, &c.

(399.) קרח the ſame; and אקדח a *precious bright ſtone* or *gem*; a *carbuncle*. In Syriac, *the chryſtalline humour of the eye*. Arabic, *a flint* from whence *fire* is ſtruck.

מסס to *MASH*, *diſſolve*, *melt*, *make liquid*, *fluid*, *thin*, *to clarify*. Iſa. lxiv. 1. Exod. xvi. 21. LXX. τηκω. In Chaldee, the ſtomach or maw of beaſts, which liquifies, digeſts, conſumes and concocts the meat.

(400) שאף its ſignification is *attraction of the air* or *ſpirit*; *to draw in the air*, *to anhelate*, *breathe*, *ſup*, *ſup up*, and the like. It is an attribute of the ſolar focus, where the ſpirit is drawn in, as it were, by the violent action of the fire, melted and thrown out in fire and light, and thereby room made for more ſpirit to come in: this action of the fire ſeeming like one with open mouth gaping for air, to draw, and ſuck in the ſpirit. Not that the ſolar focus really *attracts* or *ſucks* in the ſpirit; but only admits and receives it, *preſſed*, and *impelled* in by the force of the expanſion, or general ſtreſs of the firmament. Eccleſ. i. 5. the *Shemoſh* at its ſtation (*viz.* on each ſide of the equator to the tropics where it is conſtantly ſtationed) ישאף is continually yielding, giving way, for the ſpirit to move, puſh in, &c. Hither refer

נפח

Chap. VI.

ה נפת (of which above, p. 34. as an attribute) signifies *blowing* in general, to *blow*, *blow to*, *blow up*, *blow out*, *breathe*, and the like. Passive, *to be inflated*, *made boiling* or *fervent hot*. *Hiphil*, to *inspire*, *sufflate*. The same in Chal. Syr. Æthiop. Arab.. Hence perhaps, Gr. πνέω, πνευμα, and derivatives. Ezek. xxi. 31.—xxii. 20, 21. Job xx. 26.—xli. 9, 11. describing the Leviathan—"By his neesings *a light doth shine* [Heb. "תהל אור] — out of his nostrils goes עשן a "*fume*, as out of דוד נפוח a *Fire when blown*." Also 396. (400.)

נגד *government*, *sovereignty*. Chald. and Syr. to *draw*, applied to the *fire*; whence the idea of sovereignty is taken, as it is chief in rule in this system. Dan. vii. 10. נהר a stream די of נגר fire נגד *drawing*. This in reality is the action of the expansion; but to *those* who *judge by appearances*, it and the like seem to be *properties inherent in matter*, as *attraction* of the *Sun*, &c. &c. &c.

רצץ its signification is *contrition*, *to break*, *dash together*, and so *in pieces*, to *break by collision*, Nah. ii. 5. "Like lightnings ירצצו *they shall dash them-"selves to pieces*."

נשא signifies *a total consumption made by burning and breaking of the parts*; so, as a noun, a *flame*, a *burning*, a *fire*, *combustion*, &c. And because flame and fire, in the act of burning, is carried, and carries, upwards, hence it signifies *ascension*. (401.)

בער to *burn*, *fire*, *kindle*, &c. Isa. xliii. "The "flame shall not תבער *kindle* upon thee." 397. (401.)

פוץ from נפץ its signification is *dispersion*, or *breaking*, or *tearing to pieces*, to *scatter*, *disperse*, to *shake*, *strike*, *dash*, or *break by collision*, to *pour out*, *shed*, *project*: It expresses *dispersion made by*

Chap. VI.

fraction of the parts. Chald. and Syr. the same as Heb. *dispersion*, *fraction*, *comminution*, *contrition*. Arab. to *shake*, *shatter*, *expel*, *project*, *pound*, *beat*, or *bray small*; so *diminish*, *lessen*, *impair*, and *destroy the adhesion of parts*. Job xxxvii. 11. "The serenity, pure fire at the orb of the sun, "breaks to pieces, or dissolves the adhesion of "the grains of air, יפין ענן אורו," Job xxviii. 24. Psal. cxliv. 6.

(402.) נפק Chald. and Syr. to *go out*, *proceed*. Arab. to *make go*, or *force out*, &c. *to bring out*, Æthiop. *to cut to pieces*, *divide into parts*. Dan. vii. 10. "A "stream of fire drawing and נפק *going forth*—

נתך its signification is *fusion*, to *pour out*, *found*, *distil*, *drop*, *melt*, &c. Nah. i. 6. "His anger "נתכה is *poured out* like fire." Hence Chald. *Images*, *formed of metals*, *melted by fire*, *and poured out*.

398. (402.) עוף its signification is *instantaneous*, *vehement motion*; so to *fly*, *move quickly*, *swiftly*, &c. And hence its other significations of *complicated*, *rolled up*, Zech. v. 2, 1. which our translation renders *flying*, Job x. 22.—xi. 17. Prov. ii. 15. Isa. viii. 22.—ix. 1. Amos iv. 13. Ezek. xxxii. 10. where it is used for the motion of the grains of air, or spirit, or atoms of light. So Job iii. 9. xli. 9. Job xvi. 16. Psal. xi. 4. *&* *al.* used for *eye-lids*, *palpebræ*, from their vibratory motion, and the vibration they give to the air, like to the flying of a bird.

גבה *altitude*, to *be lifted up*, *elevated*, &c. Job v. 7. The sparks of fire (Heb. sons of burning) גביהו עוף *lift themselves up for flight*. Primarily spoke of the solar rays, which take their flight from the orb of the sun to every part of the circumference of this system. And indeed all these words

words are *attributes* of the ſolar athth or focus, where the *melting*, *fuſion*, *contrition*, *diſperſion by fraction*, *emiſſion*, and *elevation* of the *ſpirit* is performed. Ch. VII.

CHAP. VII.

THE words which follow, treat further concerning moving the earth.

שטה to *divert*, *turn aſide*, *decline*. Whence בית־השטה *the temple of the declinator:* alſo ſome kind of tree the ſymbol of this power; which ſome call the *cedar*, others, the *roſin* or *pitch-tree*, and others, the *cypreſs* or the Arabian thorn. 405. (410.)

יעד—מועד to *appoint*, *an appointed time*. The primary ſenſe of the word, as uſed Gen. i. 14. refers to the proper and fixed force of the expanſion; which force ariſes from the quantity of ſpirit melted into light, and the quanity of light emitted; for according to this, a proper degree of impulſe is given to each orb, its ſize and diſtance conſidered, and thereby their declinations, rotations, and progreſſions, are ſo proportioned in point of the velocity of their motion, and ſo of time, as beſt ſuit the neceſſities, uſes, and welfare of the ſeveral animals and vegetables on the ſeveral quarters of the globe, at the reſpective ſeaſons of the year: and as this ſettled force and operation of the expanſion makes and regulates, ſo the word is uſed for, the *ſeaſons*, the fixed and appointed periods of the revolutions of the earth, or moon, which are now

Ch. VII. now properly called *times:* yet here it had an higher ſignification, becauſe all vegetables and animals were framed to be operated upon with the intermediate light, and even the very vegetable matter, water, and ſo forth, which ſupplied them, was to be raiſed by this agent: nay, the whole quantity of the air, every body, and their diſtances, and every creature to a mite are proportioned to this operation. To this refer

406. (410.) גבל, plur. גבולות which we render *borders*, Pſal. lxxiv. 17. "Thou haſt ſet all the *borders* [Heb. "גבולות] of the earth; thou *haſt made* ſum-"mer and winter [Heb. ſummer and winter haſt "thou formed them.]" That theſe *borders* are not the utmoſt lines or parts of the ſurface of the earth, but the *airs* without it, is plain by comparing other places where the word is uſed, as Jer. v. 22. "I have placed the ſand for the גבול *bound* of the ſea." Pſal. civ. 9. "Thou haſt ſet them גבול a *bound*, that they may not paſs, Ezek. xlv. 7. From the גבול border of the ſea."—— Now, as the ſand is without the ſea, and the ſea without the land of Judea, ſo the גבולות *borders of the earth*, muſt be without the earth; that is, the different conditions, and motions of the matter of the heavens or air next the ſurface of the earth, they are the גבולות, the *borders*, as they call them, which God has framed into *ſummer*, *winter*, *ſpring*, and *autumn*, alternately.

398. (402.) יפע ſignifies that motion of *atoms* or *grains* in ſtrait lines where each one ſucceſſively impels *that* before it, expreſſed by the word *irradiate:* and this word is applicable to אפל *grains of air* or *ſpirit* moving towards the ſolar fire, as well as to atoms of light moving from it. So Job x. 22. ויפע, and it *irradiates* כמו־אפל *as grains of air* or *ſpirit*, that is, inward in lines from the cir-

circumference to the center or orb of the ſun: and Job iii. 4. Let not נהרה the *light*, or *flux*, or *ſtream of atoms* תופע *irradiate* upon it, that is, as light moves outward in rays from the center to the circumference. The heathens applied this ſort of motion to their cherubim, which were indeed the *light* and *ſpirit*; and upon that account *Moſes* and the Pſalmiſt, by way of claim, apply the word ſeveral times to God: as Pſal. lxxx. 2. *& al.* —— "Thou that inhabiteſt "the cherubim הופיעה *irradiate*. Hence Ch. VII.

חגג (of which above, p. 43.) the feaſt of *revolutions*; and נזמי *ear-rings*, ſymbols of the ſame act; namely, to attribute the powers which cauſe the progreſſion and rotation of the earth to Jehovah: As alſo 412. (416.)

עגל a *calf*, a *waggon*, a *chariot*, &c. And

מעגל a *waggon-way*, a *cart-rut*, or *way worn by carriages, an orbit*. Syriac, to *roll round, circulate*; and Chald. a *juggler, circulator*. The *calf* was an emblem of the *ſolar fire*, or rays of light, *emicantes*, iſſuing forth in *micæ*, which make the *glory* round about its orb; and the ſervice paid to it is expreſſed by the word צחק (of which above, p. 48.) and which Biſhop *Walton*, in his *Polyglot*. vol. I. p. 45. S. 11. concerning the idioms of the Hebrew tongue, ſays, "ſometimes "ſignifies to worſhip idols, and to inſtitute dan-"cing, and *tripudia*, a particular expreſſive ſort "of dances in honour of them." And the royal Pſalmiſt aſſures us, that by this action "they "changed *their glory* into the ſimilitude of a calf (Heb. שור) that eateth hay." Now *Chriſt* was the *glory of the people Iſrael*; as *Simeon*, one of their own nation, a juſt and devout man, and who waited for the *conſolation of Iſrael*, which he ſaw Exod. xxxii. 6. Pſal. cvi. 20.

Ch. VII. saw in *Chriſt*, teſtifies. Therefore the ſervice paid to the molten image, the *calf*, or rather to the *thing ſignified*, *the ſolar glory*, was due to Chriſt their *real glory*; and therefore the Moſaic ritual was inſtituted to commemorate, and καταγγέλλειν *ſhew forth*, by types, *Chriſt*, untill *he ſhould come*, who upon that account was called ὁ ερχόμενος.

414. (419) עגן Æthiopic, an *organ*, a *ſinger*, from ענה *to ſing by reſponſes*, *alternately*, *reciprocally*, as is uſed in choirs, in chanting the pſalms: the original of which cuſtom was, perhaps, to celebrate the *alternate* and *reciprocal* vibrations and irradiation of the *light* and *ſpirit*, which perform all the operations in the natural œconomy; apoſtates attributing it to the *creature*, believers to the *Creator* and to the ſpiritual œconomy, of which the natural was the type. Of this claſs is the next word.

חלל to *ſing*, or *dance* (tripudia) to the *pipe*, *timbrel*, *ſyſtrum*, *drum*, or ſome ſuch inſtrument. Alſo an *organ*, and with the *Mem* מ prefixed, a *chorus* or *choir*. In the Chaldee חלילה is a *reciprocal revolution*, a *reciprocation*, or *converſion*, ſuch as the Greeks afterwards had, and called Στροφὴ and Ἀντιστροφὴ *, which ſignification was taken from

* The *Scholia* on *Hæpheſtion* give this account — "The antients framed two larger ſtanzas and one leſs. The firſt of the large ſtanzas they called STROPHE, ſinging it on their Feſtivals at the altars of the Gods, and dancing at the ſame time. The ſecond they called ANTISTROPHE, in which they inverted the dance. The leſſer ſtanza they called EPODE, which they ſung ſtanding ſtill. The STROPHE, as they ſay, denoted the Motion of the HIGHER SPHERE, the ANTISTROPHE that of the PLANETS, the EPODE the fixed ſtation and repoſe of the earth." So *Marius Victorinus*, an antient Grammarian — "The antients ſung the praiſes of their Gods, which were in verſe, going round their altars. The firſt circuit, which they made from the right, they called

from the manner of dancing, the *tripudiators* turning themſelves round in their dancing, and returning reciprocally. In the *Samaritan verſion* it is uſed for *heaven* שמים, written חלה, Gen. i. 20, 28, 30.—ii. 4.—xi. 4. Deut. iv. 17. in which latter place we tranſlate שמים *air*, which with 2 Sam. xxi. 10. Prov. xxx. 19. Eccl. x. 20. are the only places, in the many that occur, where we have done ſo. They make this word ſignify *heaven*, as the Greek κοῖλον, (which ſeems to be derived from it) from its *concavity*; but it may have its ſignification with as much propriety from the *reciprocation* of the *light* and *ſpirit*, which are the heavens, as to ſubſtance. The Poet calls *Rhea* or *Cybele*, that is, the *flux of light from the ſun*, τυμπανοδεπον, *tympano ſtrepentem*. And her prieſts are called GALLI, from גלל to *revolve*, &c. becauſe the *courſes* or *revolutions* of the light were celebrated in this manner. And thence it became uſual to make uſe of *pipes*, *drums*, and vocal muſic in her rites, as it was paying a double ſervice and acknowledgment to the *agents* which move the celeſtial orbs, to the *ſpirit* which impels, and to the *light* which directs the force, expreſſing the manner by dancing in circles. The office of theſe חוללים, *Tibicines*, was by proper and apt muſical inſtruments, ſongs, dances, &c. (which by the way is the original of *tragedy*, *comedy*, and all our *farces*, *interludes*, &c.) to celebrate, and by that means raiſe ſome idea and image of the *mixing* and *action* of the *light* and *ſpirit* in giving rotation to the earth and the other orbs, &c. And as this ſort of *ſcenery* and *imagery*, at firſt revealed to

Ch. II.

" ed STROPHE; the return, which was made from the left, " by which they completed the former round, they named " ANTISTROPHE. Then the fingers were wont to ſtand " ſtill before the Gods, and what followed they called E- " PODE."

Ch. VIII. the Patriarchs, for their inſtruction and practice, was afterwards abuſed by the heathen apoſtates, and by little and little quite depraved, and corrupted, by many groſs additions and tranſgreſſions, God himſelf reclaimed them to himſelf and his ſervice under the law.

CHAP. VIII.

OF the Moon and Stars, &c. and how they borrow their Light from the Sun.

ארח to *walk, travel, take a journey.* Hence

ירח the *Moon*, a *month*; in Arabic, the *new moon*, by which time was meaſured. In Chaldee

424. ארח a *traveller*; and the *menſes*, from their coming periodically: יריחו the *moon's town.*

ד ל ך הלך to *walk.* מהלך a *walking*, a circuit, &c.—*Benjamin's Itinerary*, 23. Aſtron. the *motion of the planets.* We may refer hither

אהל *to pitch a tent.* The *Moon* has her tent or tabernacle, but it is not *pitched*, as the Sun's, but *itinerant*, Job xxxi. 26. —— ירח *the moon* יקר הלך *walking in brightneſs.* And chap. xxv. 5. Behold even to the moon, ולא יאהיל, *and it doth not pitch its tent.*

425. (429.) ענקים *worſhippers of the power of the air*, in *carrying the orbs*, &c. ſo called, from ענק, *a chain, collar, necklace, wreath*, or *turban*, or ſome ſuch ornament repreſenting the power they worſhipped. In Æthiopic the word is uſed Gen. xli. 42. for *putting* the golden *chain* about *Joſeph's* neck; (which chain is in the Hebrew called רבד from רב perhaps great, ſo the *enſign* of *greatneſs*) and 1 Kings xii. 14. for a *yoke.* Alſo a *precious ſtone*, a *turtle*, a *ring-dove.*

Theſe

Ch. VIII.

These *Anakim*, Numb. xiii. 34. are called in our translation *giants*, which answers to the Heb. הנפלים both here and in Gen. vi. 4. But in Num. they are called הנפילים, *those who make others fall*, *destroyers*, the sons of הנפלים the *fallen ones*: How beautifully descriptive is the distinction? — The Church called them *fallen ones*; they called themselves, *the makers of others fall*. And truly such giants the *church of God* has at all times been infested with: Men who, like *Nimrod*, are *mighty hunters* of the *faces of Jehovah*, and who are mighty active in filling up the *wells of living water*, which the true children of *Abraham* and his *faith* have digged: Men, who, tho' they have *moderation* and *toleration* so much in their mouths, have nothing in their hearts and hands, but how to pervert and destroy, by all means possible, the evidences of *Christianity*, and *those* who endeavour to keep and preserve them: "who are of those that *rebel* against the *light*, they know not the ways "thereof, nor abide in the paths thereof:" "Job xxiv. 13. who are avowed enemies of *Christ* the *true light*, and his religion, and who *give no quarter*.

סהרונין *little moons*, *a kind of ornament*, so called from their *resemblance of the moon*. Judg. viii. 26. השהרנים, rendered *ornaments* in our English; Interlin. of *Pagninus*, *Lunulæ*; and joined with הענקות, *chains* about the necks of the camels, and other such like furniture, of which *Gideon* made an Ephod. *These*, and the *like*, were all symbols of the courses of the *moon* and *planets*, and emblemed their borrowed light from the sun. 425. (429.)

ממשלת, Gen. i. 16. the means or instrument of *rule*, *dominion*, &c. spoken of the *two streams of light*; *that* from the greater and more powerful 433. (437.)

Ch. VIII.

Att (אחת) the Sun, to *rule* the day; and *that* from the leſſer, and leſs powerful, the Moon, with thoſe from the planets and ſtars, to *rule* the night. They were to rule upon the earth, in two equal diviſions, exchanging and exchanged continually in every rotation, variable and varied by the ſeaſons; and they were to have dominion and power, each in a different manner, to dilate, extend, and by the force of the ſpirit, to lead, and direct the march, or route, not only of the globes, but of every part, to the ſmalleſt atom of matter, and ſo to carry on their different dominion in fluids, vapours, vegetables, and animals, in the day, and in the night. The ſtream from the ſun to the earth will rule by day; becauſe the motion of that light is ſo much ſtronger than that from the moon and ſtars, that it, in a great meaſure, diverts their reflected ſtreams. And the ſtreams from the moon and ſtars will rule by night, becauſe the earth interpoſed, interrupts the motion of the *Shemeſh*, and hinders it from diverting the ſtreams from the moon, planets, and ſtars. And though the motion of theſe ſtreams is too weak to ſtrike in any ſuch degree as to give a ſenſible heat, yet may it be ſtrong enough to hinder the grains of air in the night-time from adhering or ſtorkening too ſuddenly, or too cloſe and hard, and thereby prevent the fluids in animals, and ſap in vegetables from thickening too much, and ſetting; with other uſes conducive to the proceſs of vegetation *.

ממשל

* The LXX render לממשלת, by εις ΑΡΧΑΣ της ἡμέρας, καὶ τῆς νυκτὸς. This ſhews that ἀρχὴ is *rule*, *dominion*, &c. not *beginning*. So Deut. xvii. 18. Iſa. ix. 6, 7. And ſo it is uſed, Luke xx. 20. —"that ſo they might deliver him (Chriſt) τῇ ἀρχῇ καὶ τῇ "ἐξουσίᾳ, unto the *power* and authority of the governor." So chapter xii. verſe 11. where theſe two words occur together, the *firſt* rendered *magiſtrates*, the *ſecond powers*. So Gen. i. 1.

of

משל signifies *similitude*, a *proverb*, *parable*, and *discourse*, as it is the picture or image of what we think: and *dominion*, *rule*, &c. A parable, or proverb, or discourse, is a picture drawn by words, so comes under the idea of *similis*, similitude. But how does its signification of *rule* tally with it? Thus, I think. Wherever the *rule* is, it is the *original* whence the *copy* is taken. Ch. VIII.

Regis ad exemplum totus componitur orbis.

(says the Poet)

"The Ruler is the exemplar, the Subject the "image, who assimilates to, and takes the "form appointed him."

בדל to *divide*, *cut off a segment*, Gen. i. 18. It is spoken of the segment taken from the night and given to the day on one side of the horizon, and of the segment taken from the day and given to the night on the other side of the horizon, on the east and west sides, or in the rotation of the earth, which is dividing between the day and between the night, and separating the light from the darkness: And also, at the same time 446. (450.)

of the LXX translation, ἐν ἀρχῇ ὁ Θεὸς, is the *supreme God*, *the God in the rule*, who has the *power*. The dispute between believers and apostates was, where, or in which essence the *power* was inherent. For in the contest between *Elijah*, a prophet of *Jehovah*, and the 450 priests of *Baal*, the test of all was, who was ὁ Θεὸς ἐν ἀρχῇ, as I may say, who had the power to command fire from heaven, and the issue proved *Jehovah*, ὁ Θεὸς ἐν ἀρχῇ. For where the *power* is, *there* is every other perfection, and *that* is the *God*. So John i. 1. ἐν ἀρχῇ ἦν ὁ λόγος, i asserting the *Logos* to be a person of the ruling essence. So those from whom Christ according to the flesh was to descend, were each called Patriarchs (Πατριαρχης) *Father of the Ruling Essence*. So putting the hand under the thigh, or rather loin, of the Patriarchs, as of *Abraham*, *Israel*, was expressive of the hopes of the *promised Seed* springing from those persons. Gen. xxiv. 2. xlvii. 29. Αρχη is used in the singular number for *rule*, by *Thucydides*, *Plato*, *Aristotle*, and also plural, by *Lucian*.

there

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there is a segment cut off and divided successively from the day and given to the night on the other side of the horizon, on the north and south sides, or in its declination, which makes the different length of days and nights in the respective seasons of the year.

The particular parts and names of the Celestial Luminaries are these.

1*st*. חמה the *Athth* at the orb of the Sun, (for the *Marth* is not visible for flame) fixed in the center of the universe.

2*d*. שמש the *flux* or *stream*, or *rays*, from חמה, which, according to their revolutions, issue out and return.

3*d*. לבנה the *Athth* of the moon (for its body is not seen for light, except in eclipses).

4*th*. ירח the borrowed and reflected stream of light from the moon, לבנה. This word is used plural, ירחים, Deut. xxxiii. 13. "For the precious things put forth," by ירחים, which proves it must be the streams of light from the moon, not the orb; that is but one, singular; not many, plural: and it is here most beautifully and properly applied, because these streams are varying and renewing every month.

5*th*. ראשי ככבים the *heads* or *orbs* of the *Stars** which we call *fixed*.

* *Solomon* makes the same distinction in the allegorical or symbolical use of these words, Eccles. xii. 2. using שמש and אור for the greater light of the *understanding* and *imagination*, and ירח and כוכבים for the lesser and reflected light of the memory, and other secondary faculties of the mind.——The verse runs thus: "while השמש the sun, or האור the light, "or הירח the moon, or הכוכבים the stars be not darkened:" which the learned Dr. *Smith*, in his Portrait of Old Age, thus explains; "before the *understanding* be darkened, the *imagina-*"*tion* weakened, and withhold its light, and those things that "were *fixed* in the memory fall from thence, and all the powers "of the mind be broken."

5*th*.

6th. גדלים the *primary planets*.

7th. ככבים and

8th. מזלות the *fluxes* from the *ſtars* and *planets*, which hit the earth, and each other.

אורים and מאורים *ſtreams of light* from *Sun* or *Moon*, &c. uſed in general for *lights*, becauſe the parts of light which reach and influence the earth and every thing there, from theſe two great ſtreams, are included in their fluxes. 458. 462.)

גדל *great* any way, be it in quantity, quality, time, duration, authority, magnificence, munificence, uſe, &c. An attribute of the Sun, as above.

קטן *leſs*, *little*, be it in quantity, quality, or uſe, &c.

The LXX render it by *σμικρυνω*, *ἐκ ἱκανὸς*, *parvus*, *non ſufficiens*, alſo by *πτωχὸς pauper*, *mendicus*, becauſe he that hath nothing of his own, muſt beg or borrow of others that are richer than himſelf, and able to give or lend. It is an attribute of the moon, as above.

שרב *violent heat*, *parching* or SHRIVELLING *heat*. 464. (467.)

ערפים *defluxions*, or *diſtillations* (of light.) Iſa. v. 30. 465. (468.)

קום *ſtation*, *ſubſiſtence*, *ſtability*. ſpoken of the *air* in the *fulneſs* and *preſſure*, and *ſtreſs* of the *expanſion*, *filling* and *compreſſing* every *thing* in every *place*. 478. (482.)

מליהם, which may have relation to מלל in the ſenſe of *friction*, and to מלא *fulneſs*: מלל ſignifies to *ſpeak* *, ſays *Caſtell*, in his *Heptaglot Lex.* but

* מול, מלל, to *cut down*, *cut off*, *chop*, as the ſcythe cuts corn and graſs. See Job xxiv. 24. the knife the fore-ſkin, and the jaws or chops, in ſpeaking, cuts the air into diſtinct articulate ſounds:

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but among the antient Hebrews had the signification of *friction*. It retains this among the Rabbins, who explain it by the Latin words, *fricavit*, *confricavit*, *trivit*, *contudit*; and the same in the Chaldee. Prov. vi. 13. "winking with "his eyes, מולל *speaking* with his feet:" which the Chaldee Targum and the Syriac Version render by תכס *terit pedibus suis:* And *Buxtorf* says, "per terere intelligitur gesticulatio *trituræ similis* "(a *jetting gate*) ad certi aiquid indicandum." The LXX translate it by σημαίνει, *significat*. So the word here, Psal. xix. 4. may be taken in this sense, that מליהם *their frictions* (viz. of the light and spirit) without words, by their substance, vibratory motions, actions and effects, point out and shew the glory and workmanship of God to the extremities of the world.*

חפף

sounds: so it signifies to *cut off*, or *destroy*, to *circumcise*, and to *speak*. And thus the heavens, by their motion up and down, like that of the jaws in speaking, send forth מליהם their *words* to the end of the world, *i. e.* from one extremity to the other.

* Psal. xix. 3. בלי נשמע קולם —— *their voice (sound) is not heard.*" The sense of the word קול in this place may be explained from its use. Eccles. xii. 4. בשפל קול הטחנה —— "When the *sound* (or *voice*) of the grinding is low." The *grinding*, is those operations in the animal œconomy, or microcosm, which turn the *food* into *chyle*, the *chyle* into *blood*, and the *blood* into *flesh*, &c. And the *sound* or *voice* of the grinding is *that* by which we know these operations are operating or doing their business, some natural symptoms significative of digestion, and all those indications that demonstrate that the works of nature proceed aright, and according to their primitive institution. So in the macrocosm, the *sound* or *voice* is *that* by which we know the œconomical operations are carried on regularly according to God's institution, Gen. i. and his promise after the flood, Gen. viii. 22. namely, the succession of *seed-time* and *harvest*, and *cold* and *heat*, and *summer* and *winter*, and *day* and *night*. But the *sound* of *what* gives us these grateful vicissitudes is *not heard*, as it is in machines of man's workmanship, as in *clocks*, *watches*, *fire-engines*, and such like.

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חֻפָּה a *bride-chamber*, becauſe it is the ſecret place of action between the bride and bridegroom. Chaldee. The *nuptial canopy*, which four Jews ſupport with four poles, under which, as under a kind of heaven, the bridegroom and bride are conſecrated and betrothed. It is primarily applied, as here, to the chamber of the שמש, that is, the חמה or *ſolar focus*, above (p. 94.) where he is conſecrated, and made fit for his miniſtry; made *Light*, and fit to run his race; made beautiful, and adorned as the bride and bridegroom were then; and made ſtrong as a *governor* גבור to march his circuits. So Judg. v. 31. As the שמש when he goeth forth in *his might*, בגבורתו, the ſame word that is uſed above, ver. 6. for a *giant*, or *one made ſtrong*, to run his race. 480. (484.)

מתהפך בתחבולתו *reverting reciprocally in its chorus's*, viz. of the matter of the air in its two conditions of *light* and *ſpirit*. Job xxxvii. 12. which *Macrobius* calls *converſio cœlorum*, the *converſion*, *revolution*, or *circulation* of the air. 498. (502.)

עשתרת *Aſtarte* *, *Venus multimammia*, *Venus with many breaſts*, the emblem of fecundity. The word is

like. No: the *great*, and *little world*, are each ſo wonderfully contrived, that their œconomy gives no noiſe or diſturbance, does not interfere with, and ſcarce comes under the cognizance of any of our ſenſes.

* This *Aſtereth* or *Aſtarte* was a Deity of the *Zidonians*:—*Solomon*, turned aſide by his foreign miſtreſſes, built a temple to her, 1 Kings xi. 5.——The *Philiſtines* had a temple to her, where they hung up in triumph the armour of *Saul*, after the battle of *Gilboa*, 2 Sam. xxxi. 10.—A city called by this name, was the metropolis of the kingdom of עוג *Og* king of *Baſan*, who was of the remnant of the *Repaim* (רפאים) Joſ. xiii. 12, & al.——And there was a very antient city called עשתרת קרנים, where *Chedarlaomer* (כדרלעמר) king of *Elam* (עילם) ſlew the *Repaim*, probably worſhippers of this power.—*Eccbart* makes the *Britiſh* ADRASTE the ſame with ASTARTE, Can, B. c. 42. fo. by 738.

Ch. VIII. is compounded of עשת to *ſhine*, *ſend out rays*, &c. and תור to *explore*, *ſcrutinize*, *to go about and look round every way*, a *ſpeculator*, *ſpy*, *watchman*, *commander:* alſo a *ſheep*, *lamb*, *turtle*, *chain*, *bull* or *ox*, a *circle*, an *orb*, French, *Tour*. (*Plowing* βυϛροφηδὸν, an exact image of the *light* flowing out one way and returning the other in *ſpirit.*) The *ſolar light* or *fire* was the *thing ſignified* by all theſe *ſymbols*, which *going its rounds perluſtrates every thing*, &c.

Hence the Chaldee word

איסטרוביל, compounded of איסתר, Greek Αστηρ, *After*, *a ſtar*, *light in irradiation*, and ביל from בל the *ſpirit*, with the ו between them. So is a deſcriptive name of the matter of both *light* and *ſpirit* in motion, a *vortex going and returning*.

נטע to *ſet* or *fix any thing in the ground*, which is effected by the *vortex of the light and ſpirit*, ſo often deſcribed above.

עשש in *Buxtorf*'s Chaldee *Lexicon*, is, a *candle* or *lamp*, a *candle fixed in the middle of a lanthorn*, a *lamp burning from year to year*.

עש is in Hebrew a *moth-worm*. And

עיש, as a verb, is once uſed, Joel iii. or iv. 11. rendered by *conglobo*, *erumpo*, *congrego*; the LXX.

by the tranſpoſition of D and T, which are letters of the ſame organ; but, I rather think that it comes from אדרש *ADRAS*, the א *Aleph* prefixed to the Root דרש, to *ſearch*, *ſeek*, *make inquiſition*, &c. which is an attribute of the *Light*, the great *Inquiſitor* of all things. From this Root the *Perſian* monarchs took their name DARIUS; and that nation we know had *Light* eminently in eſteem: OROMASDES was *Light*, their beneficent principle, and the *lion* its ſymbol.——There is an iſland, in the *Sinus Arabicus*, called *Aſtarte*, probably conſecrated by the *Phenicians* to this Deity.

σνγα-

συναθροίζω: though perhaps it had better be rendered by *contabesco*: As Ch. VIII.

עשש is to *pine*, *consume*, *waste away*, Psal. xxxi. 11.——vi. 8, &c. Whence

עש the *solar fire* or *lamp*, Job ix. 9. who maketh עש the *solar lamp*, כסיל, and כימה, &c. chap. xxxviii. 32.

כימה the *light*, whence כמה to *desire*, &c. Psal. lxiii. 2. The kindly influence of the *light* and *heat* kindling *desire*, *love*, and the soft passions.

כסיל the *spirit*, the verb כסל is to be *foolish*, *infatuated*; *folly*, &c. also *hope*, *confidence*, *expectation*: The *ilia*, or *bowels*, *wind in the bowels*, *the iliac passion*. All which are the effects of the *spirit* or *wind*. Thus we call a *foolish person*, a *windy*, *empty*, *bladder-headed fellow*: and *hope*, *confidence*, *expectation*, are only effects of being *filled*, or *blown up* with some ideas, or notions, real or imaginary. The word

כסלו *Kesholu* is used for the first *winter month*, answering our *November*, when the effects of the spirit or grains begin more sensibly to shew themselves. The words occur, Job xxxviii. 31. both together, and beautifully explain each other. "Canst thou bind the sweet influences "of כימה the *light*, or loose the bands of כסיל "the *spirit*," (bound up in grains.) So Amos v. 8. "who maketh כימה the *light*, and כסיל the "*spirit*, and turneth the shadow of death (*i. e.* the "darkened hemisphere of the earth) into the morn-"ing, and darkeneth the day with night." *Making* the *light* and the *spirit*, or as it is expressed, Gen. i. 4, 14, 18. *dividing* the *light* from the *darkness* produces the rotation and progression of the earth, &c. which, while the light is divided, or

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made out of darkneſs, or the light and ſpirit continue to be reciprocally made, can, without a miracle, no more avoid proceeding and turning about, and dividing between the day and between the night, than, in a ſufficient wind, a ſhip at ſea with ſails ſpread, can avoid being driven before the wind, and turning as it turns. The Talmudiſts give theſe words the ſame ſenſe in the *Berachoth*, fol. 58. 2, " If it was not for " the *heat* of כימה, the world could not ſubſiſt " for the *cold* of כסיל: and was it not for the " *cold* of כסיל, the world could not ſubſiſt for " the *heat* of כימה." Which is ſaying that the ſpirit muſt be melted into light [*Cime*] at the center, and the light reformed into ſpirit [*Ceſil*] at the circumference, or the œconomy of nature would ceaſe, and be at an end. So Iſai. xiii. 10. " כוכבי *the ſtars or fluxes of light* חשמים *of* " *the heavens or air* וכסיליהם *and their ſpirits*, " i. e. *the influx of ſpirit to each of them* לא יהלו אורם *ſhall not irradiate their light* or *ſtream which forms the ſtar*.——The light of the ſtars can no more ſubſiſt without the influx of the ſpirit, than the fire at the ſun can do; the action of the ſpirit being as neceſſary to blow and diſperſe the light from the planets and ſtars, as it is to keep in the ſolar fire, and diſpenſe its light and heat to us: for though it is the light which is the thing irradiated, it is the influx of the ſpirit which preſſes it out, and *irradiates* it, without which it would ſtay where it was, and not reach us. And hence we may ſee the propriety of a flower being made the emblem of irradiation in the ſacred Scripture, it being blown and ſplit into rays like the light, and that by the ſame action, and inſtrument, namely, the ſpirit, as the light, is.

קרן, whence *corono*, *corona*, a *crown*; and alſo, *cornu*, * an *horn*: The verb is to *irradiate*, *vibrate*, *ſend out rays*, in the manner of *horns*. It is well expreſſed by the Latin *irradio*, and *promico*, darting forth *rays*, or *micæ* of atoms or grains. It retains the ſame ſignification in the Chaldee, Syriac, and Arabic. The noun is an *horn*, *the thing irradiated*: the noun plural is uſed in Arabic for the *rays of the ſun*.—Some kind of an *horned ſerpent*, ſome *long-legged inſect*, like a *Scarabæus*, but a little larger, and a *Caryophyllum* or *Clove-July-flower*, are its emblems, and called by the ſame name.—The *Al-koran* has its name from this word; ſo is the *irradiator*, or *illuminator*.—The ſtreams of light between the ſun and the earth were called *rays* or *horns*, as were likewiſe the columns of the ſpirit, which on every ſide paſs between the rays of light; and which in a ſun-image were repreſented by dark rays pointed inward, as the light was by the bright or gilded rays pointed outward. And as the *power* of *horned* beaſts is in their *horns*, the *horns* iſſuing out of the heads of beaſts, were made the repreſentatives of the *powers* of theſe *ſtreams*, which from the aththis reach the earth, and exert their *powers there*. Upon this account the heathens (as *Dionyſius Halicarnaſſus*, book ii. relates) convoked the people to their religious aſſemblies by the ſound of *bulls horns*. And perhaps to reclaim this, was the Moſaic rite of ſounding with the *horns*, to convoke to the worſhip of, or to praiſe God. Upon this account the Ch. VIII. 503. (307.)

* *Horace*, praiſing wine, ſays,

Tu ſpem reducis mentibus anxiis
Viresque & addis cornua *pauperi.*

Car. 3, 21, 17.

heads

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heads of cherubim, or oxen, with horns, were placed upon the hangings of the Tabernacle, and the walls of the Temple, and elſewhere.— In token of his intercourſe and communication with God on the mount, *Moſes*'s face, when he came down, iſſued or reflected *ſtreams of light*, expreſſed by this word. And upon this account almoſt all material repreſentations of divinity or power (Δυναμις) iſſuing from God or Chriſt, or his apoſtles, have been, and are repreſented by *rays of light* ſtreaming from the head of the repreſentative: and thence the attribute of *horns* ſo often claimed, and tendered, which in the Old Teſtament run very high: So in the New Teſtament, Rev. v. 6. where the Lamb had the *ſeven horns* and *ſeven eyes* [*omnipotence* and *omniſcience*]. * *Samſon*'s *ſeven locks*, in which his *great ſtrength* (כח גדול) lay, repreſented this *irradiation*, which gives life and ſtrength to every thing, and which is exerted by the *Shemoſh* in fruit, vegetables, &c. and he was called שמשון *Semſun*, a *little* or *repreſentative ſun*. And the *Jews* tell us †, that *Solomon*, to typify this *radi-*

* Upon this account the *horn* was the veſſel from whence was poured the anointing oil upon kings and prophets, which was emblematically anointing them with the Holy Ghoſt, and Δυναμις, *the powerful one*, the *horn*, as we have ſeen, being the emblem of *irradiation*.

† See Matth. vi. 29. Luke xii. 27. —"Conſider the lillies "of the field how they grow! they toil not, neither do they "ſpin: and yet I ſay unto you, that *Solomon* in all his (Δόξη) "*glory* was not *arrayed* like one of theſe."

The glory of the one was the arrayment of art and dreſs, the others were arrayed by the immediate irradiation of the light, the glory; ſo *Solomon, in all his glory*, was not arrayed like one of the lillies, becauſe he was beholden to exterior ornaments to make him an emblem of what they repreſented naturally; being emblems both of the material and immaterial light: whence they are ornaments uſed in imperial and regal crowns

radiation or glory (for kings were types of the *light*, the heathen of the material, the Jewish of the ineffable *light* or glory) powdered his hair, which was cut short to stand out like *rays* or *horns*, with gold-dust. ——The heathens bestowed the utmost pains and expence to represent this; witness their Sun images, their Colossus's, their Pyramids, their Obelisks, which last were called in the Egyptian tongue Νιτεβπηρη, the fingers of the sun; so *Hermodactali*, the fingers of *Hermes*, which, as you may see at p. 60, *& seq.* is the power of *moving* things in or by these *horns* of light and spirit. They also abound with testimonies full to the point in hand; out of an infinite number, I shall select a few. Ch. VIII.

Bocace relates, that *Jupiter*, or *Pan*, had *horns* on his head, to represent the *rays* of the sun, moon, and other stars: his red and fiery face denoting the ætherial fire. And *Eusebius*, from *Sanchoniathon*, calls *Astarte* [עשתרת] the daughter of heaven, and says, that she put the head of a bull upon her own head, as the insign of her power, empire, or rule *. And *Selden*, in his book of the Gods of the *Syrians*, makes the curled hairs, and *horns* in the bull's head, the emblem of *fire*; and cites *Horace*——

Sed assumpto taurino capite,
" Fronte curvatos imitabatur ignes."

Macrobius informs us, that the *Lybians* represented the sun, whom they called *Ammon*,

crowns to this day, and are the bearings of the French monarch. And perhaps the *Fleur de Lis* is the mark of the North, because the needle may have its direction by means of the light.

* This was making her עשתרת קרנים *Astarte*, the Horned or Irradiated.

or

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or *Hammon*, (Heb. חמון) with the *horns* of a ram, becauſe that animal has its ſtrength in his *horns*, as the ſun has in his *rays*. And *Kircher*, in his *Œdipus*, gives an account of an image of the ſun that holds a goat by the *horns*, becauſe the ſolar *power* is expreſſed by *horns*: and alſo of an ox with an human face, vibrating or irradiating flames or rays from his head. And in his *Obel. Pamph.* from *Fulgentius*, he ſays, that the ſun is pictured with a bow and arrows, becauſe his *rays* fly out from a circle, as arrows from a bow: And from *Briſonicus*, he relates, that the *Perſians* adorned their Gods with a circle of *rays*, becauſe the light round the ſun was ſplit into *rays* *.

From this root, though it may at firſt ſight ſeem viſionary, is derived the Scotch word *CORONOCH* or KRONOCH, which, like the Iriſh howl, is a rending the air by weeping and wailing in honour of the dead. What is this but, by actions, wiſhing the deceaſed a crown of glory, by putting the air into that vibratory motion which cauſes irradiation, and forms glory, of which the crown is the emblem.——The cuſtom is very ancient.——*Deborah*, *Rebekah*'s nurſe, was buried under an *oak* beneath *Beth-el*, and the place, from the extraordinary wailing,

* Hither we may refer what *Heliodorus* and *Lucian* mention of the Ethiopians. The latter ſays,— "Τῇ κεφαλῇ ἀντὶ φαρέτρας χρῶνται, περιδέοντες αὐτῇ ακτινηδὸν τὰ βέλη.— "They make uſe "of their head inſtead of a quiver, binding arrows all around "it, in the manner of *rays*."—The former deſcribes it thus: Πλέγμα γάρ τι κυκλοτοεὲς τῇ κεφαλῇ περιθέντες, καὶ τῦτο ἕλκεσι κατα τὸν κύκλον περιπείραντες, τὸ μὲν ἐπτερωμένον τῇ ἕλκει τῇ κεφαλῇ κατατίθενται, τας δὲ ακίδας ὅιον ακτίνας εἰς τὸ ἐκτος προβέβληνται. Κάντεῦθεν ἐξ ἑτοίμε παρὰ τὰς μάχας ὥσπερ ἐκ φαρέτρας ἀφαιρῶν ἕκαστος, ἀγέρωχόν τι καὶ σατυρικὸν σκῆπτρον λογιζομενός, τε καὶ καπτόμενος, καὶ τοῖς ἰοῖς ἐστεμμένος απὸ γυμνῆ τῆ σωμάτος τοῖς ἐναντίοις ἐφίησιν. *Heliodori Æthiop.* lib. 9. p. 204. edit. 1ma. *Baſil* 1534. Græc.

was

was called (אלון בכות) *Alun-Becutt*, the oak of *wailing*. The mourning, for *Jacob* the Patriarch, lasted seventy-seven days; seventy in *Egypt*, and seven at the threshing-floor of *Atad*, in *Canaan*, where they mourned with a great and very sore (Heb. כבד) lamentation; whence the place was called (אבל מצרים) *Abel Mejrim*, the *Lamentation of the Egyptians*—So, over the Jewish kings, there was great lamentation made, and the burden of the dirge seems to have been, *Ah Adon, ah glory:* see Jer. xxii. 18.—xxxiv. 5. The dead bodies both of Jewish and Heathen kings were laid in a *bed* called *Glory* (Heb. כבוד) as appears from Isa. xiv. 18. "All the kings of the "nations, even all of them, lie in *glory*, every "one in his own house—but thou (king of "*Babylon*) shalt not be joined with them in bu- "rial." Whence it appears that these rites of *wailing*, &c. were allowed only to those who were thought *worthy*; as Jer. xxii. 18. "They "shall not lament for him (*Jehoiakim* king of *Judah*) "saying, *Ah Adon, ah glory*—But thou "(*Zedekiah*) shalt die in peace—and they shall "lament thee, saying, *Ah Adon*." They also used musical instruments upon these occasions; as Matth. ix. 23. where, upon the death of *Jairus*'s daughter, there were the *minstrels* (Gr. αὐλητὰι) and the people making a noise, or howling (ἀλαλάζοντας,* says St. *Mark.*) And, perhaps, from hence is derived the custom of *singing* before the corpse to the grave.—Under this head we may range the custom of *tolling* the

Ch. VIII. Gen. l. 1. See 2 Chro. xvi. 14. ch. xxxiv. 5. Eccl. xii. 5 chap. v. 38.

* See 1 *Cor.* xiii. 1. where ἀλαλάζον is used for the sound of the cymbal: and Jer xxv. 34. where it is used by the LXX. for sorrowful lamentation; as it is up and down in the Psalms for joyful vociferations, as Psal. xcv. 1.—— c. 1. — and xcviii. 4, 6 &c.

Ch. VIII. bell as the perſon was a-dying—which, as it broke the air, and put it into irradiation, was a prayer by action, to *lighten his darkneſs*, to break in pieces, and ſo give him conqueſt over the power of darkneſs, and the *prince of the power of the air*, as the *devil* is ſtiled, Epheſ. ii. 3. The very word *toll* ſeems to be the Hebrew תלל, uſed * for a ſong, tune, or expreſſive ſound: and the word *Bell* is the Hebrew בל, to *impel*, *make flow*, to *mix*; which the bell does to the air in ſound, by putting its parts into a vibratory motion, and ſo keeping the light and ſpirit in a proper mixture. Hence the conſecrated bells among the Papiſts had their riſe.—Hence the motto upon bells—*Fear God and honour the king*; i. e. Chriſt the true light, the King of Glory.—Hence the ringing them in *ſtorms*, *tempeſts*, *thunder* and *lightning*, which are unequal mixtures of the air.—Hither we may

* Pſal. cxxxvii. 3—"For they that carried us away captive "required of us the words of a ſong, and תלילינו שמחה. *our* "*exultations of joy.*" This was ſome tune, or &c. that attributed the power to the *Creator*, becauſe it is called the *ſong of Sion* and the *ſong of Jehovah*; which they could not ſing in a *ſtrange land*, where the *creature* was worſhipped, and where they were captives. The aſking them to ſing, was inſulting them to an high degree.—It was ſaying, "Let us now hear "you ſing your ſongs of triumph, wherein you vainly boaſted "of the ſuperiority of your God over ours, to whom, and to "us his ſervants, you are now in captivity."—The word being here uſed in the ſenſe of *joy* and *triumph*, is no objection to the etymology of TOLL, becauſe ὀλολύζω, uſed Mark v. 38. for howling for the dead, comes from ὀλολύξ, which is a military ſhout before battle, to terrify the enemy, and beſpeak victory: And indeed this was the deſign of ſuch vociferations, whether uſed over the dead or living.

תלל, whence the Latin TOLLO, is to *raiſe*, *heap*, *lift up*. We uſe the phraſeology to *raiſe* the voice in honour and praiſe of a perſon; and to this day expreſs joy by a ſound very like this word, viz. *Tol-lol*, &c. The Scotiſh word *Lilt*, for a tune, is uſed in the ſenſe of תלל, to *lift*, or *raiſe up*.

refer

refer all the *tinkling*, *sounding*, and *beating* of *cymbals*, *trumpets*, *drums*, &c. by the heathens, at the eclipses of the *sun*, *moon*, &c. in order to restore *light* and *irradiation*, of which they supposed them then to be violently deprived, by some *evil*, malignant spirit, or by what other means soever they imagined the light taken away. Hence *Job*, in his commemoration of the return of his prosperity, gives his third daughter the expressive name of קרן הפוך *Keren-Epuc*, the *horn* or *irradiation turned* or *restored*; which is rendered by the LXX. Ἀμαλθαίας κερας, *cornu copiæ*, the *horn of plenty*, or *horn of Amalthea**. Ch. VIII.

עטר the verb is to *surround*, *inclose*; so *defend*, *protect*, &c. the noun, a *crown*, *diadem*, *turban*, *tiara*, Gr. Στέφανος, Διάδημα, &c. a *circuit*, or *circle*, as the *Latins* use *Corona*.— 508. (512.)

Vulgi stanta Coronâ.

OVID. Metam. lib. 13.

The idea is taken from the action of the heavens in irradiation. Psal. lxv. 12. עטרת, "Thou "*crownest* the year with thy goodness, thy clouds "drop fatness." In a spiritual sense, Psal. viii. 5. cited Heb. ii. 7. "Thou hast crowned עטרת

* From hence too comes our word CORONER, who is an antient officer of the crown, and was formerly invested with greater authority than at present; being the only one whose office and power subsisted after the demise of the Kings. The Coroner, by virtue of his office, when any person is found dead, enquires how the party came by his death, &c. It is a quality of the Light to קרן irradiate, so penetrate, and thereby open what before lay hid and was a secret, whereby it becomes שמש χρυσος, of which χρυσος the lilly is a type, and typifies the ineffable Light and his attributes, *Jesus Christ* the Light of the world, who at the great general inquest at the last judgment will "make in- Psal. ix. 12. "quisition for blood, will bring to light the hidden things of 1 Cor. iv. 5. "darkness, and manifest the councils of the heart." More might be said upon the subject, but this is enough to point out how the office of *Coroner* tallies with the idea of קרן.

Ch. VIII. " him (the man Chriſt) with glory כבוד and ho-
" nour הדר." The LXX. Δόξῃ καὶ τιμῇ ἐστεφάνω-
σας αὐτὸν.—Pſal. ciii. 4. גואל " *Redeeming* thy
" lives from the pit, and המעטרכי *crowning* thee
(the man Chriſt) " with חסר mercy and loving-
" kindneſs."—" A Crown, ſays *Caſtell*, in his
" *Heptaglot*, is the firſt of all God's attributes."
There was a place or places called by this name.
Numb. xxxii. 2. העטרות; and ver. 34. עטרת.
Joſh. xvi. 2. with an epithet הארכי עטרות, and
ver. 5. and chap. xviii. 13. עטרות אדר. and
chap xvi. ver. 7. ינוחה עטרות, which laſt *Caſtell*
takes for *Aſhteroth*. In Syriac and Arabic the
word has the ſignification of *ſmoke*, *fume*, *va-
pour*, *breath*, *incenſe*, a *ſweet-gum*, a *perfume*, *pitch*.
As a verb in Arabic it is to *ſmell*, or *yield a ſcent*,
and in Chaldee, to *recede*, *go away*, *depart*. All
which retain ſomething of the primary idea,
allowance being made, as muſt always be
done in ſuch caſes, for the different ſenti-
ments, &c. of the ſeveral nations. The Rabbins
uſe this word for the *fore-ſkin of the glans in a
man's yard*, which reſembles a *crown*, the pre-
puce being cut off. So *Buxtorf*, in his Chaldee,
Talmudic and Rabbinical *Lexicon*, ſays, עטרת
is the *crown of the glans*, the *glans* or *head of the
penis*, its *crown*, as it were, *and incloſure*, the
fleſh covering the glans or *nut*; which makes it
ſeem probable that this part of the member was
made a repreſentation or ſymbol of this attribute
of *crown*, or *circle*, דור, דאר, or אדר, *radia-
tion*, round the Sun *. They repreſented the
אתת *Aihth* or *Att* of light, as it appears on
every ſide of the ſun; and the *Att* upon the

* This conjecture ſeems favoured from the place where Cir-
cumciſion was renewed by Joſhua, being called גלגל GILGAL,
circulation, or *revolution in a circle*, Joſh. v. 9.

her

hemisphere of each other orb, as the *cap* of a *crown*; and the streams of light, from each to each other globe, were represented by tapering plates of gold, and the globe at the end of each by a bright stone. The *tapering plates* or *horns* were symbols of *radiation*, *power*, Δυνάμις, the *globe*, of *glory*, Δόξα, כבוד, הדר, &c. So the *Beast*, in *Rev.* xiii. 1. had ten *crowns* (Διαδήματα) upon his ten *horns*, which was assuming the *kingdom*, the *power*, and the *glory*; whence he had the name of *Blasphemy*. — Chap. iv. ver. 4. the Elders had *crowns* (στεφανες) upon their heads; and chap. xix. ver. 12. Christ is represented with crowns (διαδήματα) on his head. Thence all the representations of *crowns* in the Tabernacle and Temple; the claims and tenders of *that* attribute, and *that figure* upon the head, as the emblem of sovereign power.——Isa. xxiii. 8. *Tyre* has this attribute given it, צר המעטירה, rendered *Tyre*, the *crowning* city. Ch. VIII.

גל, גלל, גול, to *roll*, *revolve*, &c. It expresses all sorts of revolutions. —— When it is applied to a *solid*, 'tis *turning it round*, one part up and the other down alternately, and so moving it forward; as 1 Sam. xiv. 33. "גלו *Roll* a great "stone unto me."——When it is applied to a *fluid*, as fresh water, for instance, it signifies *going down and returning up*, as the revolution of water by springs; as Judg. i. 15. "Give me also גלת *springs* of water." — When to salt water, it expresses the flux and reflux, or *flow* and *ebb*, of the sea, &c. as Job xxxviii. 11. "here shall thy "proud גליך *waves* be stayed." * 511, 12, & seq. (515, 16, &c.)

גלגל

* So גלל is used for *dung*, excrement, &c. which is rolled downward by the circulation of the microcosm. And the English word *reveal*, q. d. *reveil*, the Latin *revelo*, the Greek ανα— απο-

Ch. VIII. גלגל, the root doubled, *revolution of revolutions*, the PRIMUM MOBILE; the *circulation* of the heavens or air, which produces all other revolutions. — *Buxtorf* says, it is a *sphere*, a *circle*, &c. and that hence among astronomers the seven orbits of the planets are called גלגלים; and cites a Rabbinical passage, גלגל ספירי, והכוכבים אונם ספירים, "The sphere or orbit "is sapphirine or pellucid, but the stars are not "pellucid." Which is applying the epithet, ספירי *clear like sapphire*, to the matter of the heavens, and not to the substance of the orbs. And it is explained by שחקים ספריים, the *sapphirine heavens*. The שחקים, as p. 47. are the joint action of the *light* and *spirit struggling* to take place of, and so mix with each other: and in a serene day *they* appear of a bright blue or *sapphirine* colour, what we call a *sky-blue*.

The word גלגל, in its primary and full signification, expresses the columns of the *spirit*, which continually pursue the *light* upon each orb, and so impel the earth and planets in those bended lines which we call their orbits, and which the *Jews*, as above, call their spheres, and describe as *sapphirine* or *pellucid*, and in the same condition as the שחקים, *the air in conflict*, *the strugglers*.

The earth and planets move in, and are moved by these גלגלי, *circulators*, or *vortices*; but then it must be remembered, that these are not vortices of the whole matter of the heavens in each circle at once, but that action of the hea-

αποκαλυπτω, by which גלה is sometimes rendered, retain the same idea; which is taken, as I think, from the drawing up or *rolling* the *veil* or curtain, which hung before, and covered their sacred images or shrines, and so *revealing* them to sight.— So גליון and מגלה is a *volume*, or *roll*, Isa. viii. 1, Jer. xxxvi. 23.

vens

vens or air at each globe occaſioned by the in- Ch. VIII.
terruption of the light, and the driving in of the
ſpirit, which continually attends, and puſhes each of thoſe globes, and ſo in the progreſſion of each globe about the ſun, makes a vortex in each part of each ſphere or orbit, but only where the globe is at that time. From thence the word is carried down to all leſſer and particular revolutions of the ſame kind, and to all other kind of revolutions, as Iſa. xvii. 13. to the *circular motion* of the air in a *whirlwind*; Pſal. lxxvii. 19. to the *circulation* of the heavens or air in the act of *thundering* and *lightening*, where, as all is full, the grains accede and the atoms recede in the ſame lines.—Iſa. v. 28. the rapid motion of *wheels* is compared to the rotation of air in a whirlwind. — Dan. vii. 9. גלגלוהי נור דלק, *his wheels*, or revolutions *as fire burning*: perhaps the three agents might be at work here, and the action or circulation of fire carried on in the form of a wheel. Eccleſ. xii. 6. to the circulation of the blood; (of which more fully below.) So גול, *joy*, *rejoicing*, &c. the effect of its circulation; which was outwardly expreſſed by motion and geſtures of the body, ſuch as turning round, dancing in circles, and ſuch like. So גלה אזן, a ſtrictly philoſophical expreſſion, for the air in ſound *traverſing* the *labyrinth* of the ear. Many perſons and places took their names from this attribute, as גלית, *Goliath* of גת *Gath*; i. e. *the circulator of the wine-preſs*, who was איש־הבנים, LXX. Ἀνὴρ Δυνατὸς, vir intermedius, *a powerful one*, the *ſtander between them and the enemy*. And his name, גלית בגת, *the circulator of the wine-preſs*, imports much the ſame as what Chriſt, the real *ſtander between* us and

Ch. VIII.

and our spiritual enemies, is called in Scripture, the *treader of the wine-press*; or perhaps גלית may come from גלה, and then it will signify the *taker of captives*. —— Hence *Galilee* had its name; and hence Christ and his Apostles were in contempt called *Galileans*, i. e. *circulators*, *jugglers*, *magicians*, &c. thereby attributing the miracles they wrought to the power of magic. And to assert his superiority over the heavens, the material agents, in the power of working miracles, Christ wrought the first miracle in *Cana* of *Galilee*. Upon which St. *John* remarks, chap. ii. 11. "This beginning of miracles did "Jesus in Cana of Galilee, and manifested forth τὴν δόξαν αὐτοῦ his glory" That is, gave demonstration, that he was the *glory Jehovah*, the Δύναμις ὑψίστε, the Δύναμις Θεοῦ, the פלא, the person possessed of the great and invisible power; "and his disciples believed in him," (*viz.*) that he was *that* person. Glory and light in irradiation is the express image of his person, the character of the divinity in Christ; and his humanity, his body was the temple or house of the glory, from whence it issued out with healing in its wings, and diffused its beneficence every way. This word is compounded with עד, as in גלעד. And as it was the custom from the beginning, to record in the names of their children and places, the attributes and offices of him in whom all nations were to be blessed, this name is expressive of that Person whom Job xvi. 19. calls בשמים עדי, his *witness* in heaven; and St. *John*, Rev. i. 5. —— iii. 14. the *faithful witness*, who, in the pre-appointed *revolution* of time, was to wash us from our sins in his own blood.

Isa. xi. 6.

There was a noted place in the land of *Israel* called בית גלגל, *the temple of Gilgal*, dedicated,

I sup-

I suppose, to this power, whose ascent was very lofty and steep, its descent shelving and winding. It might, perhaps, be like the tower of *Babel*, whose summit was an altar to the heavens or air, and its winding, spiral ascent might represent the גלגל הנדלים, the *revolution of the planets* *. The Scriptures mention one or more places, or cities, where the *Canaanites* worshipped their God, the שמים heavens, under this attribute of the *causer of revolution.* 1 Sam. x. 8. there is mention of one which seems to stand low, where there was an altar upon which they sacrificed at the making *Saul* king. [See 1 Sam. xi. 14.—xiii. 9.] But whether there was a temple does not appear. But there were graven images mentioned, Judg. iii. 19, 26. by the common name פסלים, which the LXX translate here γλυπτὰ, as they do Deut. xii. 3. where this word is used for the *gods of the nations*; and in the Second Commandment they render it by εἴδωλον. The representatives of this power are called, Deut. xxix. 17. by the name of the thing represented גלולי; and Ezek. xx. 7, 8. they are said to be the *idols* of *Egypt*; and verse 24. the *idols* of their fathers. And as this word represents the universal power which includes the *fire*, *light*, and *spirit*, all idols are comprehended under this name; and the word כל is often used with it, as Ezek. vi. 13. The worship of the heavens or air under this form of motion, is described in the text just cited, and Ch. VIII.

* We find a general notion of this as low as *Ovid*, Metam. L. 2. V. 70. as also of the Light moving in a direction contrary to the Spirit, and the opposition and struggle it thereby goes through.

——Assiduâ rapitur *vertigine* cœlum,
Sideraque alta trahit, celerique *volumine* torquet.
Nitor in *adversum*: nec me, qui cætera, vincit
Impetus: et rapido *contrarius* evehor orbi.

Ch. VIII. the worſhippers threatened, Hoſ. ix. 15. — xii. 11. Amos v. 5. It conſiſted in ſacrifice, and burning incenſe, &c. This motion of the orbs, &c. is repreſented by wheels, which were emblems of the power which revolves the earth; and the ſervice to this power was running and turning of wheels, to repreſent the earth's rotative and progreſſive courſe. Thence wheel-work in the temple, as chariots were an emblem of carrying the earth and other planets in the progreſſive motion, and ſo brought into the temple. See 2 Kings xxiii. 11. And this is claimed upon the columns, &c. before the temple. See 1 Kings vi. 34. —— vii. 41, 42. and 2 Chron. iv. 12, 13. and is ſuperſeded by miracles. The heathens had this ſymbolical rite of turning a wheel in the temples of their deities, as *Clemens Alexandrinus*, from *Dionyſius Thrax*, in his book of the ſignification of the ſymbol of wheels, informs us: „Hence the chariot races among the *Greeks* and *Romans* had their riſe: hence too the games of the *turbo* and *trochus*. The *turbo* was a ſort of top, which they whipped round. The *trochus* was an hoop of iron five or ſix feet in diameter, ſet all over in the inſide with iron rings: This was whirled along (as our boys do the wooden hoops) with a rod of iron having a wooden handle; which rod was called by the Greeks Ἐλατὴρ, *the driver*, by the Romans *Radius*. —— *Horace*, in his *Art of Poetry*, ranks this among the manly ſports in the *Campus Martius*.

" Ludere qui neſcit campeſtribus abſtinet armis,
" Indoctuſque pilæ, diſcique *trochique* quieſcit."

But theſe nations, at the time *Horace* wrote, ſeem to have arrived at that height of human wiſdom

wiſdom and knowledge (as our moderns by copying them have done) as to be thoroughly ignorant of the original deſign of theſe, and all other inſtitutions, and to view them in no other light than play-things and diverſions. Ch. VIII.

The *Jews* call the beginning of *Ezekiel* מעשה המרכבה the *chariot* or *wheel-work:* they ſay, it is full of myſteries, and therefore not to be explained, concerning which there is a tradition in the *Talmud.* This, I think, contains a threefold confeſſion: Firſt, That the viſions of the wheels, &c. are emblematical. Secondly, That they are not explained. And, Thirdly, That they, the enemies of the croſs, would not have them explained. Which is a ſtrong intimation and preſumption to Chriſtians, that they contain *ſome things* which the apoſtate *Jews* would not have Chriſtians come to the knowledge of: the completion will help us to the explication of the myſteries—The two viſions were directly leveled againſt the ſervice of this power, called גלגל, and ſo ſhewed what it was that the heathens, and their fathers, and, perhaps, ſome of their deſcendants ſerved for God; and that it was only the effect of created matter, and mechanical. They ſhewed, that the *glory*, *Jehovah*, was to depart from their Temple, and not return till it came in the Temple of Chriſt's body; ſo the Jewiſh was to give way to and be ſuperſeded by the Chriſtian diſpenſation. And beſide this, they prefigured the reſpective parts, which each perſon of the cherubim, the repreſentatives of the eternal uncreated Trinity, and of the man united to the ſecond perſon, the lion, the *light*, was to act in the covenant of grace, for the of redemption of fallen man: which belongs not to this place.—Let us take a view of the viſions. In the firſt, the SPIRIT, the FIRE, and the LIGHT firſt

Ch. VIII. appeared, each in its reſpective action; then out of the midſt of the fire the likeneſs of four moving creatures, the cherubim, with the faces of all their repreſentatives, and with wings; then the machine, or wheel-work, and its motion by the ſpirit; then they ſtanding under, and ſo ſeeming to carry the complex work of the three agents, or of thoſe two which went out of fire; then the likeneſs of the expanſion, terribly bright as chryſtal ſtretched forth over their heads above; and above that the *Glory-Jehovah*, God-Man. And to prove more ſtrongly what this repreſented, the prophet uſes the word אופן for the wheels, in deſcribing the wheel-work, the wheel within a wheel. And, chapter x. after he had been ſhewn by a viſion, chap. viii. what ſervice had been paid to theſe powers at *Jeruſalem*, he calls the whole גלגל, as verſe 2. "And "he ſpake unto the man clothed in linen, and "ſaid, Go in between *Gilgal*." So verſe 6. where both words are uſed. — "When he had "commanded the man clothed in linen, ſaying, Take fire from between the *Gilgal*, from "between the cherubim; then he went in and "ſtood beſide אופן one wheel: and one cherub "ſtretched forth his hand from between the "cherubim unto the fire that was between the "cherubim, and took and put into the hands of "him that was clothed in linnen. ver. 9.—— "behold the four אופנים wheels by the cherubim, one אופן wheel by one cherub, and "another אופן wheel by another cherub: and the "likeneſs of the אופנים wheels as the colour "of a beryl-ſtone; and their appearance as a "wheel (אופן) within a wheel (אופן)." And to put beyond doubt what was meant, the appearance, by a ſupernatural voice was called *Gilgal*.

Gilgal. Verſe 13. "As for the אופנים wheels, Ch. VIII.
"he called them the גלגל in my hearing." Nor could there be any diſpute what eſſence theſe cherubim repreſented, the uncreated or the created, ſince they commanded the material created ſubſtance, fire, light, and ſpirit, the cherubim of heathens and apoſtates, to obey them; and one of them took coals of fire, and put them into the hand of the man clothed in white linnen to ſcatter over the city, which was forcing them to act againſt themſelves, and deſtroy their worſhippers; which, had they had that power and intelligence in them which the apoſtates ſuppoſed they would not have done, or ſuffered to be done. And the appearance of the man in glory upon the throne above the expanſion that was over the heads of the cherubim and wheelwork, ſhewed that Chriſt, the ſon of man, was to be the miniſter of the new diſpenſation, the plan of redemption; that he was to reign over the ſubjects of theſe powers, and ſo be carried by them, and their repreſentative beaſts, in triumph.

The Talmudiſts give us to underſtand, in their way, that theſe wheels are ſymbols of aerial powers. For the prohibition, Exod. xx. 23. "Thou ſhalt not make to me any ſtrange gods," they thus explain, (i. e.) "Thou ſhalt not make "after the likeneſſes of my miniſters that mini-"ſter before me on high, ſuch as are אופנים "the wheels, ſeraphim, ſacred animals, and mi-"niſtering angels." Our divines would make us believe theſe are ſpiritual angels, but it has now been ſufficiently proved, that they are not the ſpiritual, but the material hoſt of heaven, Pſal. civ. 4.
the mechanical powers of the air, the fire, light, and ſpirit, which God has made his agents and mi-

Ch. VIII. miniſters, and which the Scriptures, over and over, inform us the apoſtate Jews and Heathens worſhipped.

519. (523.) סביב this word is uſed for the circulation of the heavens or air, and expreſſes *the revolution on every* ſide, *from circumference to center, and ſo round.* The Heathens give us an exact definition of the idea contained in this word, in the deſcription of their *Deus*, which was indeed the air, when they tell us, as does *Plato*; —— Ὁ Θεὸς ἀεὶ κυκλομετρεῖ. *God continually acts in a circle.* So to reclaim this, Pſal. lxxvi. 12. "Vow and "reclaim to your *Elahim* all סביביו his circuits." The word is uſed, Ezek. i. 4. — "And behold "a whirlwind came out of the north, a great "cloud, ואש מתלקחת ונגה לו סבוב, and a "fire infolding, exchanging, or ſpreading itſelf "to a ſplendor or glory all around it." Pſal. l. 3. "A fire ſhall devour before his faces (the "idea taken from the athth of the ſun) וסביביו נשערה מאד "and his circuits a violent "tempeſt." Pſal. lxxxix. 8.—"God is terrible "in all his סביביו circuits." (The idea taken from the appearance of the ſun in ſtorms and tempeſts.) Pſal. xcvii. 2.——ענן וערפל סביביו. "Clouds and darkneſs his circuits." Here God is repreſented encompaſſed with clouds and darkneſs, as this ſyſtem is *. So in that glorious deſcription of Job xxxvii. 11, 12. "The fire diſ-"ſolves the denſe air: the cloud (*i. e.* the re-

* *Lucretius* makes this ſyſtem ſelf-bounded, by condenſed ether. Book V. ver. 408.

"Sic igitur tum ſe levis, ac diffuſilis æther
"Corpore concreto circumdatus undique ſepſit,
"Et late diffuſus in omnes undique partes
"Omnia ſic avido complexu cætera ſepſit."

"turning

" turning ſpirit) diſperſes its light, and it, *from* Ch. VIII
" *all parts round, returns by its reciprocal motions** "
" (inward and outward) that they may execute
" what he has appointed them on the face of the
" ſphere near the earth."

The *Jews* were required, by the law, to pay ſeveral acknowledgments to *Jehovah-Elahim*, in the ſame manner the Heathens had paid them to theſe *powers*; and perhaps ſome others might be directed afterwards by prophets upon ſpecial occaſions: ſo that every Hebrew word of acknowledgment to God, ſuch as we render *ſolemnizing*, *feaſting*, *rejoicing*, *confeſſing*, *praiſing*, *ſinging*, *playing*, *ſounding*, *dancing*, and ſuch like, not only deſcribe theſe actions, or the actions of the mind or body, or upon the inſtrument; but the actions of the heavens or air, for which God was thereby praiſed: ſo that *ſinging*, or *playing*, or *dancing*, &c. as we ſay, ſuch a tune, or upon ſuch an inſtrument, by the ſound, motion, or &c. expreſſed the *attribute* which the Heathens had aſcribed to matter, and which the *Jews* thereby aſcribed to God; ſuch as 1 Chron. xvi. 31. Pſal. xcvi. 11. " Let the heavens or air ישמחו
" *reciprocate* or move backward and forward."
Pſal c. 2. " Serve Jehovah בשמחה in expreſ-
" ſive recognitions of this reciprocal motion;

* מתחפך בתחבולתו, *reciprocally reverting in chorus.*—The chorus of the antients ſeems to have been a repreſentation of this aerial chorus. A chorus, whether it be of dancers or muſic, is made up of ſeveral different parts, whoſe reciprocal motions compoſe the whole. Now *this* part takes the lead, and is a principal, then *another*, and then a *third*, till each, in its turn, has taken the feuge: the other parts in the mean time being ſo interwoven with each other, changing and interchanged, that the chorus is always kept up ſtrong and full; which is exactly the caſe with the parts of the heavens or air. This they called the muſic of the ſpheres, by which was meant, not the ſolid orbs, as has been ſuppoſed, but the æthers which carry the orbs. *Confer. p.* 97, 110, 111.

" come

Ch. VIII. " come before his faces ברננה with ovation," singing, shouting, &c. We put a small portion of the air by the voice into this quivering motion, or vibration, which is therefore expressive of the motion that circulates the earth, &c. So Isa. xlix. 13. " רנו sing, *vibrate*, ye heavens, " and גלי roll round, or circulate, oh earth." Chap. xliv. 23. רנו " Vibrate, oh ye heavens." Psal. lxv. 9. " The outgoings of the morning " and the evening תרנין shall praise thee;" That is, the airs which circulate the earth, and thereby alternately turn it into morning and evening, by this their *vibration*, shew forth thy power and handy-work. Psal. xlii. 5. " I will go to " the temple of the Elahim, in the voice רנה " of singing, or shouting," [which is putting the air into a vibrative tremulous motion, which *Job* * gives to the columns of light and spirit which support and carry the earth] " and תורה " confession." (This was expressed many ways: In what manner it was done here, the next words explain.) המון חוגג " the multitude dan- " cing in circles, tripudiating." So Neh. xii. 27. at the dedication of the wall of Jerusalem, " they kept it with שמחה and תודות † and שיר " joy, confessions, and songs, cymbals, psalte- " ries and harps." What were all these but several confessions that Jehovah was creator, former, and master of the powers of the air, and so by these several actions described in these words, ascribing to him the power and the glory due unto his name, which the apostates and heathens had unjustly robbed him of, by ascribing them to properties inherent in the air. So Psal.

* Job ix. 6. " Which shaketh the earth out of her place, " and the pillars thereof *tremble*." So chap. xxvi. 11. " The " pillars of the heavens or air *tremble*."

† The LXX have the word θωδασμὸς for the Heb. תודות.

lxix.

lxix. 35. "Let the heavens and earth יהללוהו Ch. VIII.
"praise, or give radiation to him, *i. e.* Jeho-
"vah;"— the heavens or air by their irradiation and thereby circulation of the earth, the earth by being circulated by that irradiation. *Job* puts the sense of the word beyond dispute, chap. xxxi. 26. "If I beheld the אור * light when it
"יהל irradiated or shined."—and he lets us know that paying the least adoration to it was denying the אל ממעל irradiator on high.——So Jer. xxxi. 4. "Oh virgin of Israel, thou shalt again
"be adorned with thy tabrets, and shalt go
"forth in מחול the choir משחקים of those who
"dance, the mystic dances that represent, and
"so ascribe to Jehovah, the conflict of the hea-
"vens or air in the opposite motion of its parts." So at the bringing up of the Ark to the Temple of *Solomon*, 2 Chron. v. 12, 13. "The Levites
"arrayed in Byssus, white silk, stood with cym-
"bals, psalteries, and harps, at the east end
"of the altar, and with them an hundred and
"twenty priests מחצרים בחצרות trumpet-
"ing with trumpets; and the trumpeters and
"singers were as one to make one sound to be
"heard להלל ולהדות in praising or attributing
"irradiation or glory to, and thanking or con-
"fessing Jehovah." And he shewed his approbation and acceptance of this service by the signals of his presence, for as soon as the sacred music had played, the cloud, and the *Glory-Jehovah* filled the *Temple of the Elohim*.

The *Jews* had two kind of trumpets or instruments to sound with; the one named חצוצר, the other שופר: the first we render *trumpet*, the second *cornet* †. The חצוצר was a strait tube,

* The LXX translate אור in this place Ηλιος.

† That sacred to the *Light* might have a shriller or treble tone; that to the *Spirit* a deeper or base tone.

Ch. VIII.

and, I think, was a ſymbol of the rays or columns of the ſpirit; the שופר was a crooked tube, and, I think, was the ſymbol of the light as it firſt comes from the athth of the ſun: juſt as in a ſun-image, where the *ſpirit* is repreſented in ſtraight lines or horns pointed inward, the light is figured in bended or crooked horns pointed outward.—Levit. xxv. 9. 'In the day 'of atonement the שופר was to ſound through-'out the land, and proclaim liberty; which 'ſeems to be typical of Chriſt the true light 'coming into the world to preach deliverance 'to the captives, to proclaim the great jubilee, 'the acceptable year of the Lord, and ſet at 'liberty them that are bruiſed." Luke iv. 18, 19.

As our tranſlators have rendered שמש the *body* or *orb* of the *ſun*; ſo have they likewiſe rendered the words applied to, or uſed with it; ſuch as יצא, זרח, בוא, &c. as if the orb moved round the earth, and ſo roſe and ſet in reality, as it does in appearance; whereas theſe words of themſelves imply no ſuch thing. Indeed, if theſe, or any other words of motion, be applied to an agent that moves itſelf, in this caſe the agent may be ſaid to *come* or *go*; if to an agent that leads or drives other things, it may be ſaid to *bring* or *carry* them; but if to a *patient* which is moved or impelled by ſomething elſe, in this caſe the patient can only be ſaid to be brought or carried by that other which impels it: So in the Hebrew phraſes לפנות ערב בקר לפנות, which we tranſlate *when the morning appeared,—when evening cometh on*; which is tranſpoſing the words, and predicating the verb of motion of the *morning* and *evening*; whereas the texts ſay, not that the *morning* or *evening* turned, but that ſomething underflood *(viz.)*

(*viz.*) a segment of the earth's surface with its inhabitants was turned into or to the morning and evening. And as this implies the diurnal motion of the globe of the earth, so by parity of reason תקפות השנה *the revolution or gyration of a year*, must imply the progressive or annual motion of the earth. But, further, the Scripture tells us expressly what it is that is turned Job xii. 22. —— * יצא לאור צלמות —— *He bringeth to the light the shadow of death*, i. e. the dark hemisphere of the earth; the *place* to the *light*, not the *light* to the *place*. So Amos v. 8. הפך לבקר צלמות —— *turning to the morning the shadow of death*, i. e. the dark hemisphere. Ch. VIII.

When therefore the sacred writers speak of the שמש, the *light*, they use the word זרח, in the first sense, for the *going out* of the light from the opposite hemisphere, into the hemisphere (and so country) where the writer lived, or which he spoke of; and they use בוא for the *going in* of it into the opposite hemisphere. This way of expressing motion stands a little opposite to our manner of speaking, not only *ad captum vulgi*, but philosophically: for though our pretenders to more knowledge than the inspired writers, have, by chance, stumbled upon the motion of the earth, which they own was known to the first astronomers, Egyptian or Chaldean; yet as they continue perfectly ignorant of the agents which circulate it, the light and spirit,

* The whole verse runs thus——"He rolls round the lower "parts, and brings to the light the shadow of death" עמקות is the dark hemisphere, which is called *low* with respect to the enlightened one, which is termed uppermost; as we say, *the Sun is down*, or below, when the earth, by rolling round, has turned the place, where we are, from the light; and *the Sun is up*, above, or risen, when the earth, by rolling round, has turned up the place, where we are, into the light. See chap. xxviii. 11.

Ch.VIII. what they are, and how formed: they talk as confusedly, and with as much uncertainty about these points as the vulgar.—— They confound the מארת, the *orb* or *body* of the sun, and אתת, the *hot ethth*, or *action of fire* in the *orb* or *body*, with מאור the *stream of light* from the ethth of the sun, which successively hits the earth, whose end is called light (to which the rule and government of and in the day is given) and שמש the flux of light from the ethth of the sun on every side to the extremities of the heavens, which includes מאור, and which is one half of the matter of the whole heavens or air; a cone of which light, having its vertex at the sun, covers one half of the earth with its base. This is translated and called the *Sun:* and when they endeavour to speak of light as something separate, they speak of it as an effect, and call it *sun shine*; though all is full between, and by the continual compressure of the returning spirit, the air divided into light at the אתת only drives the intermediate light in that line against our eyes. So they talk of the apparent *rising* and *setting* of the sun, but still without having any fixed sense of the word. But the Scriptures are clear and determinate, and use proper and distinct words. And as the מארת is a round mass of matter, bounded and passive where it is, and cannot act where it is not present; and the אתת and חרם only acts in the pores of that body, and at a small distance about its surface, where it is present, and while it is in form of fire, or flame, and none of them come to the earth; they apply not the terms of זרח and בוא to them, but to שמש, which really is, and acts upon the earth *.

Moses

* N.B. A seeming objection may arise to this, from Judg. viii. 13. where we have מלחמה החרס translated, *before the sun*

Moſes uſes יצא, Gen. xix. 23. for זרח —— 'השמש יצא על־האדץ, the ſun went forth up-
'on the earth, as *Lot* בא went from *Sodom*
'into צערה *Zoar.*' So Judg. v. 31. 'They
'that love Jehovah כצאת השמש בגבורתו (ſhall
'be) as the going forth of the ſun in *his might*:'
or, as the 19th Pſalm expreſſes it, 'יצא כגבור,
'as goeth forth a giant, or one made ſtrong to
'run his courſe: whoſe מוצא going or iſſuing
'forth is from one extreme of the heavens, (*viz.*)
'the center, and his revolution by the other ex-

ſun was up. —— And chapter xiv. 18. where we read בטרם יבא החרסה rendered, *before the ſun went down.* In the firſt of theſe texts מלמעלה is an adverb, and the text implies nothing more than this, that the *ſolar fire* was yet *above*, without determining what moves, or ſtands ſtill. The Interlineary of *Pagninus* has *de ſuper ſole* (ſc. *exiſtente.*) And an old Engliſh Bible—*the ſun being yet high.* Our tranſlators have rendered מלמעלה *before*, and inſerted, after חרם, the words [*was up*] to make out what they thought the ſenſe of the paſſage; but the context ſhews the meaning to be, that *Gideon* returned from battle *the ſun being above* the horizon. In the ſecond, the final ה. by their own rules of grammar, oppoſes the noun's החרסה being the nominative caſe to the verb יבא; ſo it muſt be taken and rendered impersonally, as in the Hebrew phraſes, *it turns evening*, *it turns morning*; or in our Engliſh ones, *it rains*, *'tis night*, *'tis day*, &c. and it will literally run thus בטרם *before* יבא *it went toward* החרסה, *the ſun-ward.* The laſt day of the feaſt was almoſt expired; and before *it* went toward the light or ſolar fire, they told the riddle.—בוא or בא is *to go*, or *cauſe to go* from one place to another; and although we may be obliged to render it by various Engliſh words, yet will they all come under this idea.

N. B. The LXX, according to the *Vatican* copy, render החרם in the firſt paſſage as a proper name, Αφες; the ſecond they tranſlate προ τε ανατειλαι ηλιον, *before the ſun roſe*; which is not ſo wide of the matter as it at firſt ſight looks to be. The Hebrew is, before *it* (viz. the day or place where they were) went towards the ſolar orb. Now any given place upon the terreſtrial globe, from mid-day to mid-night, is turning or going from the ſolar orb, and from mid night to mid-day, it is turning or going towards the ſolar orb. So the text implies, that on the ſeventh day of the feaſt, before mid-night, the time when the place, where they were, began to turn towards the ſolar orb, they unriddled the riddle.

trenies

Ch. VIII.

'tremes, the circumference; and there is no-
'thing hid from his heat, or the ſmall parts in
'motion:' For it ſtrikes and puſhes againſt the ſide of the earth, and againſt the ſide of every orb in its way, and gives each its proper degree
'of glory and gravity, as the true *Shemoſh* of righteouſneſs, in the ſpiritual ſyſtem, or the next world, will do to his faithful ſervants: as Dan. xii. "And they that are wiſe ſhall ſhine כזהר
" הרקיע as the brightneſs of the firmament or
" expanſion (which is put into that condition by the צאת חשמש the going forth of the *Shemoſh* in his might) " and they that turn many
" to righteouſneſs, as the ſtars."

522 (527) The word יצא expreſſes the *goings out* of the שמש on every ſide of the ſun; the word זרח expreſſes the manner. זרח to *diffuſe itſelf*, to *ſcatter* or *diſperſe* light, to *riſe*, *ſhine out*; and it is particularly ſpoken of the *riſing* of the ſun, and the day, which at its riſing or breaking ſcatters, and pours forth or diffuſes, bright and ſplendid rays, and ſo has ſome affinity with זרה to *ſcatter*, &c. In the Arabic it ſignifies *to move* from place to place. The word has no relation to the motion of an orb, as the word פנה has; but expreſſes the manner of the motion of light, or the שמש, which moving in a ſtraight line, puſhes againſt the earth in its way to the circumference, or extremities of this ſyſtem, and thereby gives the ſpirit, in its way to the ſun, the center, an opportunity of ruſhing into the lightened hemiſphere, at the evening or weſtern edge, where the impulſe firſt began, and ſo diſperſing the light there, and circulating the earth. It is a complex word, and expreſſes an action wherein ſeveral things (a ſolid or point fixed, and a ſolid and fluids continually or ſucceſſively in motion) each in their reſpective manners, are concern-

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ed. The whole root of the word expreſſes the action of being preſſed out, being forced to retire from a point outward or backward, and forcing what it can drive in thoſe lines, being puſhed forward by thoſe in ſucceſſion behind, againſt, and moſtly ſtopped by, ſomething ſolid before. This motion is firſt, as has been deſcribed, with reſpect to the center of the ſun, whence the שמש, by the deſcending ſpirit, is preſſed outward, and ſo upward: with reſpect to the earth, it is preſſed or puſhed in this line towards its center, or againſt its ſurface: but in repetitions, or ſucceſſion of its parts ſtriking againſt the hemiſphere of the earth, it is, as we call it, ſhining, or reflecting each atom by others in ſucceſſion; being firſt puſhed againſt, and then puſhed out, or driven, by ſucceeding atoms, or by the ſpirit; and each drives the other againſt and from each part of the hemiſphere, with reſpect to the earth's center, upwards. * And though the word has no more relation to *riſing*, than בא has to *ſetting*; yet part of the שמש, (viz.) the part we are ſpeaking of, is always above that ſide of the earth oppoſite to the ſun, with reſpect to the earth's center. And though the courſe of the שמש change not, by the turning of the earth, yet is it alternately above, and below, any one country, as a man terms the ſide, he is upon, uppermoſt. Ch. VIII.

In that noble deſcription, which the wiſeſt of men, and the greateſt naturaliſt, compleated by the ſpirit of propheſy, has left us of the motion of the שמש, the ſpirit, and thereby of the earth, Eccleſ. i. 4. the ſame word זורח

* See *Enquiry after Philoſophy and Theology*, pag. 138, &c. edit. Edinburgh. *Editor.*

is

Ch. VIII. is used for the שמש upon the hindmost edge of light on the surface of the earth שואף *yielding*, *receding*, giving way for the spirit to move and push in that line, and so disperse the שמש there, or press it successively upward from the center of the earth, and so push against and impel the earth. So that if it had not been expresly revealed, that the earth turns round, and goes in an orbit, be it circular or elliptical, about the sun, when it is shewed that the שמש does not turn or go about the earth, the revolution from night to day proves the earth's rotation as that of years does its progression.—But that is not all: for here are at once shewn the manner and the instruments by which those motions are performed. The *light* is the *ruler*, the *leader*, אדון the *spirit* the *driver*, the *impeller*, מלך the *earth* the *patient*.

Eccles. i. 4. דור generation הלך comes on, ודור and generation בא goes off, והארץ but the earth לעולם עמדת is supported to the end, וזרח השמש, and the *Shemosh* springs up, ובא השמש and the *Shemosh* goes off, ואל מקומו and at its place or station, שואף continually drawing in, or receding to, the spirit זורח הוא שם it is continually springing up from thence הולך alternately going אל דרום towards the south, וסובב אל צפון, and circuiting round to the north, סובב סבב, circuiting its circuits, הולך הרוח, the spirit is continually or successively coming on, ועל סביבתיו, and upon, or in, its circuits, שב הרוח, the spirit reverts.

The royal author is here shewing that every thing is subject to the heavens, the air, in its three conditions of *fire*, *light*, and *spirit*, of which the שמש is the principal agent and ruler, in this system. He is not, as we render him, treat-

treating of winds blowing, or such comparatively small actions, but of the *circulation* of the *circulators*, the *airs*, which produce and regulate the motion of every thing that moves in this system, of the whole heavens, the earth, and waters upon and under the earth, *Ver.* 7. And he shews how their respective rotations supply the race of men in their successive generations with necessaries to the end of the world: And though they are in a continual fleeting state, yet the support of man is produced by their fluxions. Ch. VIII.

First, he tells us, generations are brought on, and generations are carried off; but the earth, for the use of all generations, is supported in all its conditions, motions and courses, in its rotations, declinations, and circular progressions, &c. Next, he informs us in order; how, and by what agents this is performed; which is in the following manner.——The שמש, or flux of light springs up from the אחת of the sun, and 'goes forth as a 'bridegroom from his chamber, and as one made 'strong to run his race,' and in its way hits against the earth in a cone of light, whose base covers one whole hemisphere, having its vertex at the orb of the sun. But this light would continue upon one and the same hemisphere, and neither rise nor set, unless the earth, by being turned, shifted it on to another part, which was dark, and as much of the dark part on to the part which was light, and so made days and nights; or else the point from whence the stream of light proceeds must go round the earth. But this point (the orb or athth of the sun) is at a vast distance from the earth, is neither upon it, nor can act but where it is present; and what is here spoken of, is said to be, and act on the earth, and at its *station to draw in the spirit.*—— Whence it is evident, that it is the *light*, not the orb of the sun, which is here said to move; and consequently,

Ch. VIII. sequently, as the agent which divides and ſends the light againſt this orb of the earth does not move, but is fixed, that proves that the earth is turned and moved.——But why is it not expreſly ſaid that the earth moves? If there were any ſuch properties inherent in matter, as thoſe with which our philoſophers have lately inveſted it, or could bodies, once projected, continue motion by innate virtues after projection, without an impulſe from without continually acting upon them; then it might be proper to attribute motion directly to the earth. But if the earth cannot move one turn, neither in its regular or progreſſive motion, further than the light and ſpirit direct and give it motion, the light by ſpringing up at the inſtant the ſpirit impels the earth, and thereby שׁוּאָה receding, and ſo giving the ſpirit an opportunity of ruſhing in, and turning ſucceſſively part of a new face, at each puſh, into and out of the light.——If this, I ſay, be, as it really is, the caſe, then it is more proper to name the *agents*; for ſaying, that they act upon the earth which is paſſive, and that they riſe and ſet, as we term it, and go to the ſouth and to the north, is not only ſaying that the earth moves, but that *they* move it.——Thus far relates chiefly to the rotation of the globe—What follows regards its progreſſion.

The ſpace between the two Tropics, or the Torrid Zone, is מְקוֹם, or the *grand ſtation* of the light or שֶׁמֶשׁ upon the earth, from the middle of which (*viz.*) the Equator, it declines twice every year, now to the ſouth, and then round towards the north pole, in a conſtant orbit, which we call the Ecliptic. The light not only ſprings up to the earth every morning, and gives the ſpirit an opportunity of impelling the earth at the evening edge, but taking its ſtation, as it neceſſarily muſt, on the middle of the orb, the ſpirit from each pole will

will push into this enlightened space, and cause the earth to decline alternately from equinox to solstice. Ch. VIII.

One half of the globe is always illuminated; and at the equinoxes, the line, or circles, that divides light and darkness, or the *Shemosh* and the spirit, cutting the equator at right angles in ♈ and ♎ coincides with the poles of the earth. As the *Shemosh* springs up thence, and goes south or north, this circle of illumination begins gradually to change its position, it no longer coincides with the poles, as before, but cuts the axis of the earth at the centre, and forms a small angle; one half of the axis being on this side of the solar horizon, or line, that bounds the circle of illumination towards the sun, and the other half on the opposite side: For at the same instant the spirit pushes into the light at the evening or western edge, to give the globe its diurnal motion, the spirit from one pole (the south for instance) pushes into the enlightened space between that pole and the tropic of *Capricorn*, and alters the position of the boundary line of light and darkness; and this consequently varies the pushes of the spirit, both that at the evening edge, and that from the pole, which alter, as the direction of that line alters, whose inclination to the earth's axis varies from 1° to 23° 30′. By which means the earth will have part of a new face turned into and out of the light at each push, and this will preserve the parallelism of its axis, and cause the declination, and so the inequality of seasons and days. —— When the solar horizon, or boundary of *Shemosh* and spirit, continually shifting as the earth goes forward, gets to the distance of 23° 30′ from the axis, with which it makes an angle of so many degrees; that is, when the earth arrives at ♑, which is its greatest declination southward, (equal to the inclination of the

Ch. VIII. ecliptic to the equator) and therefore the ſun appears in ♋, where it will ſeem to have its greateſt declination northward, it has then got to the length of its tether, and can run out no further without breaking it; that is, the earth can decline no further, unleſs it was to fly off in a tangent to its orbit, which is prevented by the preſſure of the ſpirit on her back, or dark hemiſphere, continually tending to the ſun, the center, and which is here at right angles with the lateral impulſe, and keeps her in her orbit: and conſequently, as the earth turns from the tropic of ♑, that is, from our ſummer ſolſtice (the preſſure of the ſpirit at its back, or what they call the centripetal force continually urging it to the ſun) the *Shemoſh* or light, with every diurnal gyration of the globe, gradually withdraws itſelf from the north pole, and comes on at the ſouth pole; and ſo the ſpirit purſuing the light brings the earth to equinox again, or makes the line which divides the *Shemoſh* and the Spirit coincide with the axis; and from equinox it will proceed to the other ſolſtice, and ſo on, in the ſame manner, and for the ſame reaſons, as deſcribed above *. Beſides, as the impulſe and

* The increaſe of the preſſure of the ſpirit from the equator to the polar points, where it is the ſtrongeſt, is proved by this undoubted experiment.

If upon a Terrella turned out of a very good loadſtone, which has marked on it the polar points, and the equator, tropics, and colures drawn upon it: if, I ſay, upon its equator you lay a piece of a needle, it will continue in a horizontal poſition; move it ever ſo little towards either of the poles, it begins to form a very ſmall acute angle, move it forward by little and little and the angle gradually increaſes till it reaches the pole where the needle ſtands upright, and forms a right angle with the plane of the equator. Whence it manifeſtly appears, that the ſtrongeſt preſſure of the ſpirit muſt be upon the polar points, and muſt gradually decreaſe as you approach the equator, where the preſſure becomes equal.

But

and force of the ſpirit acts in proportion to the ſuperficies of what it puſhes againſt; the larger the Ch. VIII.

But it may be objected, that when the preſſure of the ſpirit is equal at each pole, as it is at equinox, then the earth according to theſe principles ſhould move in the equator. I anſwer, ſo it would, if the condition of the airs at each pole were then equal or the ſame. But when the earth is at our autumnal equinox, for inſtance, the air is much thinner or rarer at the north pole than it is at the ſouth pole, the north pole having been in the light from equinox to equinox, and therefore the ſpirit will of courſe ruſh into that thinned ſpace, and ſo keep the Earth in the ecliptic. And the caſe will be the ſame at the vernal equinox, for then the ſouth pole will have been as long in the light as the north pole was before; and conſequently the air being rarer there than at the north pole, the ſpirit will bend its courſe towards the ſouth, rather than towards the north pole where the air is groſſer: So that though the preſſure upon each pole be ſuppoſed equal at the equinoxes, yet the condition of the air at each pole being unequal, this will cauſe the ſpirit to puſh into the part where the air is the thinneſt, and ſo always keep the preſſure at one pole greater than at the other, and by this means the earth in the ecliptic.

My worthy friend, the ingenious Mr. *Henry Horne* upon *London* bridge, has a conjecture, and no improbable one, *viz.* that the moon is an agent concerned in the earth's declination, the interpoſition of whoſe orb, &c. taking off the preſſure of the ſpirit where it is moſt neceſſary, prevents the earth going forward in the equator, or in the direction in which it turns round, and ſo facilitates its motion from tropic to tropic; and what further balance is wanting may be ſupplied by the planets, which moving round the ſun, ſome at one diſtance, ſome at another, intercept, and ſo ſhorten the columns of the light and ſpirit, thereby directing and regulating their force and agency, ſo as to put the parts of the earth's ſurface into thoſe periodical poſitions to the line of light from the ſun, which cauſe the alternate viciſſitudes of ſpring and ſummer, autumn and winter, with all their conſequences and effects.

To ſettle this will require a great number of accurate obſervations and nice calculations, ſo I muſt leave the hint to its author, or to others, who have proper inſtruments and abilities, to proſecute and go thorough therewith; and ſhall only obſerve, that as the planets are in Hebrew called מזלות *influencers* or *regulators*, men, when they began to loſe the knowledge of the mechaniſm of the agents, and to ſet them up as Gods, might imagine that they had an influence over their lives and fortunes,

Ch. VIII. the ſuperficies, the greater will be the impulſe: Whence it follows, that as the earth is an oblate ſpheroid flatted at the poles, it will in its progreſſive annual motion turn at one time a broader, at another a narrower face to the impulſe of the ſpirit. The narroweſt will be at the equinoxes, and from thence each ſurface will grow broader and broader to the ſolſtices, and narrower and narrower from the ſolſtices to the equinoxes again: and this will not only cauſe the orbit of the earth to be elliptical, but will alſo concur to cauſe the declination of the *Shemoſh*, or of the earth, as 'tis called. For from each equinox, the impelling force gradually increaſing with the ſurface objected to its impulſe, the earth will gradually enlarge its orbit, or run out more and more towards a right line, by which means the *Shemoſh* will decline or ſpread by turns over each pole; the boundary of light and darkneſs gradually gaining upon one pole, and falling ſhort of the other, and ſo making gradually a greater and greater angle with the axis, till it comes to 23° 30′: And from each ſolſtice to each equinox, it will gradually draw back towards the pole it overſpread before, and as gradually advance towards the pole it before fell ſhort of, making ſtill a leſs and leſs angle with the axis till it coincides with it.——The earth moves between a column or cone of light, or *Shemoſh*, whoſe baſe covers the enlightened hemiſphere, having its

tunes, &c. whence judicial aſtrology had its riſe. And if the aſtrological configurations of the planets, and the placing them in houſes, and the calculations of their different poſitions, aſpects, &c. be of any antiquity, it might originally be deſigned not to calculate nativities, but to meaſure the force and action of the light and ſpirit, and how much and in what manner their agency was diminiſhed, increaſed, or altered by thoſe different poſitions.

vertex

vertex at the sun, and between a column or cone of spirit, whose base covers the darkened hemisphere, having its vertex at a proper distance towards the circumference of this system: to what distance it extends, is difficult to determine, but the moon is within that distance, and by it tethered to the earth: and in whatever part of its orbit the earth is, it moves between two such columns acting upon it.—The lateral impulse of the spirit acts in the line which divides the two cones of light and spirit, and is their common base upon the surface of the earth. The place of the *impulse* is the western or evening edge, where *it* first began, Gen. i. 5.—Its direction is from west to east. This is what the *Newtonians* call projection, or the projectile force. The spirit descending on every side from the circumference in strait lines to the solar focus, urges the earth in every part of its orbit towards the sun as its center; and this is what they call *gravity*, or the centripetal force: and between these two forces they own the earth may perform its circuit. Let T, be the earth; SWE, the cone of light; CWE, the cone of spirit; and the line WE, the common base of both. The pressure of the cone of spirit CWE, will urge the globe towards the sun, and so in every part of its orbit; and the impulse of the spirit at W, will impel it in the direction of the line WE; for as all is full, a single grain of the spirit cannot take place of the light at the western edge W, but the next adjoining side-grains will rush in with a lateral impulse, in the direction WE. And the spirit rushing into the cap of light at W, will not only turn the earth round from W to E, by pulling W, into the dark cone CWE, and E into the light one SWE, but must also push it forward the same way from W to E; so here we have both its rotular and progressive motion. It is allowed

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Ch. VIII lowed that the impulſe of the ſpirit at W, may turn the orb round; but denied that it is ſufficient to give its progreſſive motion: becauſe, ſay the objectors, the reſiſtance of the ſpirit at E, will be a counter-balance to its impulſe at W. But it muſt be conſidered, that the inſtant the impulſe begins at W, and turns a ſegment of the orb into the dark cone, from the light, a like ſegment at E, is turned into the light; and by this means the light ſprings up from E, and declines or recedes towards W; whereby the ſpirit at E, inſtead of lying a dead weight, or reſiſting at E, flows or turns with the orb into the light, and follows the light as it recedes from E to W, and ſo yields an eaſy paſſage to the earth, by making the reſiſtance before always leſs than the impulſe behind: by which means the earth muſt continually be kept moving on from W to E, becauſe the ſpirit puſhes and impels from W to E, and the ſpirit at E recedes with the light from E to W; and as the earth *hangs upon nothing*, *i. e.* in open air, and does not turn, as a wheel, upon an axis, but is puſhed forward by repeated impulſes from without at its hinder ſide W, which are ſtronger than the reſiſtance before at E, there is nothing to hinder its progreſſive motion. Beſides, as the earth leaves behind, in its progreſſive motion, a column of light, and a column of darkneſs, the ſpirit in the lower part of the column of darkneſs left behind the earth, and that ſpirit behind the lower end of the column of light alſo left behind the earth, puſh into the part of the column of light the earth has left behind, and into the edge of the cap of light the earth hath turned behind, in two directions; one will puſh on the earth, and the other will turn it. And it muſt likewiſe be conſidered, that the propulſive force of the ſpirit is greater at the weſtern edge, than at the eaſtern, the cap of light being more rarified

E
T
W
C
Spirit rushing into the cap

S
The Light receding
E
T
W
C
Spirit rushing into the Cap of Water

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rarified towards that edge than towards the other, Ch. VIII.
becauſe the light from the ſun has operated all along from the weſtern edge to the meridian, every line having lately been a meridian; whereas the reverſe happens at the eaſtern edge, every line having lately been in darkneſs or groſs air. Upon which account the action of light is not only greater, the parts ſmaller, but the cap deeper towards the weſtern edge than towards the eaſtern, and this makes the firmament brighter at the ſun's going off, than at his coming on. All which make the puſh greater on that ſide than the reſiſtance on the other; both by greater force from the ſun, while the action and re-action continue, and freer and greater ſcope for the admiſſion of the ſpirit when that edge turns off, and the action and re-action from the ſun to the earth, &c. ceaſes. And that this greater force may be kept in due proportion, to anſwer its end of impelling and driving the earth; and the earth hindered from flying out of its orbit, it is counterbalanced by the part of the column of darkneſs which has been longeſt at reſt, and thereby become groſſeſt and moſt full of ſpirit.

There is then a threefold impulſe acting at different places upon the earth; one at the back or dark hemiſphere; another at the ſide or confines of light and darkneſs; and the third by turns from each pole. The firſt retains the earth in it's orbit; the ſecond impels it forward; and the third cauſes the declination: the "Light by that "means (as *Solomon* deſcribes it) going towards "the ſouth, and turning round to the north, goes "round in a circle; the ſpirit coming on, and "in its rounds the ſpirit returns."

I may have fallen ſhort in my explication of the manner how the agents act and perform their office; but, I think, it evidently appears, that the

Ch. VIII. Scriptures make the *Shemoſh* and the ſpirit the agents which move the earth; and that there is a perfect harmony in all their accounts. The royal Pſalmiſt deſcribes the שמש as having a *Tabernacle fixed* in the heavens, or air, from whence he goes out as light, from one extremity of the heavens, *viz.* the center, and his revolution, as ſpirit, is by the other extremity, *viz.* the circumference or verge of this ſyſtem. The שמש, and its *Tabernacle*, are ſpoke of here as *two diſtinct* things: the *Tabernacle* is ſaid to be placed, or *fixed*, in the heavens, or air, and the שמש to *iſſue* from it, and *run its race*: ſo the שמש cannot in this place be the *orb* of the ſun, nor the orb of the ſun in this place be ſaid to move. In like manner, in *Solomon*'s deſcription above, the שמש is ſaid to ſpring up on the earth, and to go off;— to draw in the ſpirit at its ſtation: — to ſpring up from thence, and to go towards the the ſouth, and turn round to the north, completing its circuit; — and that the ſpirit comes on purſuing the light, and returns in its rounds; that is, goes and returns from one tropic to the other alternately. * So Joſhua x. 12, 13. "Sun "ſtand thou ſtill upon *Gibeon*." Heb. שמש בגבעון דום † — "*Shemoſh* be ſilent upon *Gibeon*." "And thou, Moon, in the valley of *Ajalon*."— וירח בעמק אילון, "and the *Ireh*, (not לבנה) in

* See *An Enquiry after Philoſophy and Theology*, chap. IV. *Editor*.

† St. Mark iv. 39. uſes this manner of ſpeaking — "And "(Jeſus) ſaid to ſea, Σιώπα, *be ſilent*, πεφίμωσο, *be mute*,— "and there was a great calm."

Claſſic authors have alſo imitated this uſe of the Hebrew phraſe in their languages. *Virgil* has———

——Taciturnæ per amica *ſilentia Lunæ*.

And *Pliny*. Luna *ſilens*, for the unenlightened hemiſphere of the moon being turned towards the earth, when it cannot *irradiate* its borrowed light.

the

the valley of *Ajalon*." (A place, perhaps, ſacred to the irradiation of the *Ireh*, as *Gibeon* was to that of the *Shemoſh*.) Here the two fluxes of light are ſpoke to; that from the Sun, called, Gen. i. 16. the *greater light*, which rules the day; and that from the Moon, called the *leſſer light*, which rules the night. What was there to ſtay at *Gibeon?* not the globe, or orb, or body, or fluid of the Sun; it was neither there, nor upon it. But the light, or greater degree of light was there, and ſtaid there, and was what was wanted, and was ſpoken to: and the leſſer degree of light in the valley of *Ajalon*; and what was there obeyed. There is no mention what globes moved or ſtood ſtill.—But it is implied, in conſequence, that a globe ſtood ſtill, or, at leaſt, did not turn round. And if that globe moved of itſelf, it would be proper to ſpeak to *it*; but if it was moved by an agent, then it would be proper to ſpeak to that agent or operation which moved or turned it; for ſtopping the operation would ſtop the progreſſion or rotation of the earth. *Joſhua* had the ſame maſter, as his maſter *Moſes*; ſo had *David* and *Solomon*. He made no miſtakes, but he and they agree in the ſame account. He ſpoke to *that*, which had the firſt motion, and which moves every thing in this ſyſtem which does move; and if its operation be *ſilent* in any part, *that* part will ſtand ſtill; and if *ſilent* in the whole, all operation and motion will ceaſe. Commanding the שמש to be *ſilent*, is, in *Solomon*'s words, commanding *it* not זרח *to ſpring up*; and as it is the אדן, *hinge*, on which the earth turns, ſtopping its motion, is ſtopping the motion of the earth. When this injunction was taken off, or ceaſed, we hear nothing of any new projections to ſet what was ſtopped a going; and there needed none. The שמש would of courſe זרח *ſpring up*, and all would go on in the ſame

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Ch. VIII. same channel as before. So 2 Kings xx. 11. Isa. xxxviii. 8. "the bringing of the shadow ten de-"grees backward," was commanding the same operation, and shewing God's power over it, in that part of its service.

I shall conclude this Volume with an Explication of the CIRCULATION of the BLOOD, as described by the same royal Prophet above, Eccles. xii. 6. It is chiefly an Extract from the pious and learned Dr. JOHN SMITH's Book, intituled, *King* Solomon's *Portraiture of Old Age*, save that here and there I have made use of Mr. HUTCHINSON's doctrine of the *Steam*, which is a freedom I am inclined to believe the Doctor, were he living, would pardon.

Eccles. xii. 6. "עד־אשר ירחק חבל הכסף *Or ever* "*the silver cord be loosened*; ותרץ גלת הזהב *or the* "*golden bowl be broken*: ותשבר כד על־המבוע "*or the pitcher be broken at the fountain*; ונרץ "הגלגל אל־הבור *or the wheel broken at the ci-*"*stern.*"

The whole six verses contain, by way of allegory, the progress of death, or an anatomical enumeration of the sad *Symptoms* of extreme old age; and such an one as I dare be bold to say, is not elsewhere to be found. This last verse describes *those* that immediately forerun man's dissolution; and, whenever they are found, give a most certain prognostic of approaching death, and may be called the four *attendants* upon dying man.

FIRST SYMPTOM.

The First is, *the Loosening of the Silver Cord.*

By the *silver cord*, not only the *spinal marrow* is here to be understood (as principally it ought to be) but all the nerves arising thencefrom, and also all

all the filaments, and fibres, and tendons, that proceed from all those nerves, with all the other rivulets of animality. In short, it comprehends the whole instrument of sense and motion, *&c.* after it has proceeded out of the skull, and as it is distributed throughout the body, with all its coats and tunicles, with all its divisions and separations. And although all these several and innumerable filaments are to be accounted hereunto, yet they are most aptly expressed in the singular number by the *silver cord*, because they are but the continuation of the same thing; the fibres being nothing else but the nerves divided and dispersed, and the nerves nothing else but the spinal marrow in like manner separated, as so many arms and branches of the same tree. They are all *one* in their original, the brain: They are all *one* in their continuation for a long time in the spine; are all *one* in their colour, which is white, — in their form, which is long and round, — in their coats, which have the same three tunicles, and in their use, to convey the *steam*, which they call *animal spirits*, and all this in an apt resemblance to a *cord*, to which they are not unlike in their division, for then they are but as so many wreathes or wattles of the same cord; and what is most observable to the present purpose, the more distant they are from their original, by so much the thinner and finer, the harder and more compact they grow, like the several smaller and better twisted ends of the same cord.

It is called the *silver cord* from its colour, appearing to the eye, of a white, shining, resplendent beauty, bright as silver; and this even when taken out of the body after it is dead: how much more beautiful must it needs be while it remains in the body yet living, and actuated with abundance of the most refined *steam*. As *Job* says, "surely

" ſurely there is a vein for the ſilver," ſo this *ſilver cord* has a deep, ſecret, and ſecure place in the body, lying lower, deeper and ſafer than the veins or arteries, or any other common conveyers in the body of man. It is alſo called the *ſilver cord* on account of its excellency; for as ſilver is next to gold in value and eſteem, ſo this part, of which we are ſpeaking, is next unto that moſt abſolute and perfect part, the brain, which in this very ſymptom is aſſimilated unto that moſt abſolute and perfect mineral, gold. And, laſtly, we muſt not yet paſs by unobſerved, how naturally and beautifully it takes in the idea of the verb כסף, which ſignifies *to deſire*, *luſt*, *affect*, *crave*, &c. For this *ſilver cord*, including the ſpinal marrow with all its branches, is the inſtrument of vitality, and of the higheſt and moſt noble operations thereof, and upon it depend all our *appetites*, *deſires*, *affections*, &c. and as it is looſed and weakned, ſo are *they*. Hence the antients called the cavity of the ſpine Ιερὰν σύριγγα, *the holy pipe*; and the great maſter of phyſicians dignified it with the name of Αιών, *vitality*. When this cord is *relaxed*, *contracted*, or *broken aſunder*, as the word רחק is here variouſly tranſlated; we muſt then expect a ſudden diſſolution *.

This looſening of the cord is what the *Greeks*, and the *Latins* from them, call Παράλυσις, (*Paralyſis*) from λύω, ſolvo, *to looſe*; and we a *palſy*. When

* Job xxx. 11. ſays, ſpeaking of his earthly tabernacle,— " He (God) has let looſe my cords, and afflicted me."—And as it was ſaid of the Tabernacle, " that it was ſpoiled, and " near its utter ruin, when the cords thereof were broken;" the ſame may be ſaid of our earthly tabernacle: But we have this comfortable proſpect, that it will be raiſed from the duſt, " a Tabernacle that ſhall not be taken down, not one of the " ſtakes thereof ſhall ever be removed, neither ſhall any of the " cords thereof be broken." *See* Jer. x. 20. and Iſa. xxxiii. 20.

this

this ſolution happens only to one part of the ſilver cord, it is a particular palſy, and affects thoſe parts of the body only, which the *ſteam* is hindered from reaching, and animating: when it happens to the head of the ſpinal marrow, whereby the influence of the *ſteam* is hindered from acting upon the whole ſilver cord, it conſequently takes away all ſenſe and motion from the ſubjected parts, and cauſes an univerſal palſy; which, at all times, and upon all occaſions, gives a very probable prognoſtic, but in the decrepit age of man, a moſt certain, and infallible one, of immediate death.

SECOND SYMPTOM.

The ſecond attendant or ſymptom is, *the breaking of the golden bowl.*

The *golden bowl* may include the *Dura Mater*, the *pericranium*, and *cranium* itſelf; but what is principally intended is the *Pia Mater*, that moſt inward membrane which, by immediate contact, encircles the very ſubſtance of the brain. This is that part which deeply inſinuates itſelf into all the anfractuous paſſages of the brain; and being firmly annexed thereunto, keeps every part thereof in its proper place and due texture; ſo that whatſoever is performed within the whole compaſs of the brain, whether the ſecretion of the *ſteam*, its exerciſe therein, or its diſtribution thencefrom, is done principally by the help of this membrane: which the antients, upon account of its motherly care, have juſtly honoured with the name of *Pia Mater*. And if we do but throughly conſider the innumerable branches of the veins, but eſpecially of the arteries that are hereunto inſerted, their wonderful interchaſings, intermixtures, and inſertions, not only one into another, but even among them-

themſelves, (which is not found in any other part of the body) we ſhall ſurely be induced to believe, that the greateſt depuration and defecation, and conſequently the higheſt exaltation of the *ſteam*, is performed herein.

It is called the *golden bowl* for the ſame reaſons for which the other was called the *ſilver cord*. Firſt, in reſpect of the colour, not only becauſe that moſt precious and deep coloured liquor of life is abundantly contained in the veſſels of this membrane; but chiefly, becauſe the membrane itſelf is ſomewhat of a flavous colour, and tends more towards that of gold than any other part whatſoever. And as there is "a (מקום) place for gold where they "Heb. יזקקו fine it," ſo there is an hidden, ſecret, and well defended place, where this precious part has its natural reſidence, for the fining and purifying the *ſteam*. But chiefly it is ſo called from this its excellency, and its univerſal uſe. The inſtrument that depurates the beſt of blood, and defecates and exalts the *ſteam*, and ſo prepares them for animality, can be likened in this lower world to nothing but that moſt abſolute and perfect, that beſt concocted and moſt exalted mineral of gold; to which it has a very great reſemblance in ductility. For as gold of all metals is the moſt ductile, and may be drawn out at the greateſt length; ſo the *Pia Mater* is pure, fine beyond expreſſion; and none but the diligent obſerver, who has often endeavoured its ſeparation from the parts to which it is annexed, can poſſibly underſtand its exquiſite fineneſs. For this, as ſo much leaf-gold drawn out to a very great thinneſs, doth ſecurely, tenderly, and univerſally wrap up all thoſe little hills and valleys, thoſe convex or concavous parts that are within the compaſs of its own circumference.

This

This *golden bowl*, ſo long as man remains in his ſtrength, is firmly knit unto itſelf in all its parts, but in the extremity of extreme old age, when he is juſt giving up the ghoſt, it can no longer continue its continuity; but by reaſon either of its natural dryneſs, ſhrivelling into itſelf, or preternatural moiſture, imbibing excrementitious humours, till it is over full, it often ſnaps aſunder, and ſo *recurs* into itſelf, as the word רצץ properly ſignifies; from whence the brain muſt neceſſarily ſubſide, and all the parts ſerving in any wiſe to animality, muſt be ſuddenly and irrecoverably ſmitten, and ceaſe from their ſeveral uſes; moreover immediately hereupon follows a change of the whole countenance, the noſe appears very ſharp, the eyes ſink in the head, the temples are pinched in, the ears become cold and contracted, and the fibres thereof inverted, the ſkin about the forehead hard, intenſe, and dry, and the colour of the whole face livid and black, and in all things perfectly repreſenting that laſt farewel, known among phyſicians by the name of the *Hippocratic Face*, and ſo conſequently the man dies immediately apoplectical; according to that of *Job*,—"Thou changeſt his "countenance:" (and what follows immediately "thereupon) "thou ſendeſt him away." So that the ſymptom hereby intended, is, a ſudden abolition of all the operations of the brain, of motion, namely, ſenſe, and the other animal functions, both the principal as well as the leſs principal ones, with the *Hippocratic Face*. Query, If what they call *a concuſſion of the brain*, is not *the breaking of the golden bowl?* Ch. VIII.

THIRD SYMPTOM.

The third symptom is, *the Breaking of the Pitcher at the Fountain.*

As the two former symptoms belonged to the inſtruments of the *animal* faculty, ſo theſe two that remain belong to the *vital.*—But we muſt further know, for the explication of theſe ſymptoms, that there are within the body of the heart two firmly diſtinct cavities, a right and a left, uſually called *ventricles*; from which there ariſe, and unto which there are annexed, certain peculiar veſſels conducing to the ends hereafter ſpecified.—Out of the right ventricle of the heart, proceed the great vein, called *vena cava*, which ſends forth branches throughout the whole body; and has, at its entrance into the heart, certain portals, from their form called *valvulæ tricuſpides*; and alſo that artery, antiently called *vena arterioſa*, inſerted into the lungs, unto whoſe original are annexed the portals reſembling the Greek *Sigma**, and are therefore called *valvulæ ſigmoideæ.*——Out of the left ventricle proceed that vein antiently called *arteria venoſa*, inſerted in like manner into the lungs; and alſo the great artery called *arteria aorta*, which diſpenſes its branches throughout the whole body, both whoſe cavities are defended with the like portals as the former. It remains only to ſhew how the blood and life is actuated in theſe parts, and how it paſſes in and through them, and in and through the whole habit of the body; which is by way of rotation, or running the round, going out from the fountain, and returning thither again;—"The *Shemoſh* ſprings up, and the *Shemoſh* goes off:

* The Greek *Sigma* was written thus *C*, whence theſe Valves are alſo called *Semilunares.*

"and

" and at its ſtation drawing the ſpirit, ſpringing Ch. VIII.
" up from thence, going towards the ſouth, and
" turning round to the north, goes round in a
" circle: The ſpirit coming on, and in its rounds
" the ſpirit returns.—— All the rivers are conti-
" nually running into the ſea, yet the ſea is not
" full: unto the place [the great reſervoir, the
" abyſs] from whence the rivers are continually
" running, thither are they continually returning,
" ללכת, in order to go their round."—— Thus it pleaſeth the king to expreſs the *circulations* of the *greater* world: thoſe of the *leſſer* are no leſs remarkable. The blood, wherein is the life of man, paſſes about the body continually, and returns according to its circuits: the ſtreams thereof run into the fountain, which is never full: unto the place from whence they come, thither they return, to keep up the circulation, which is thus performed. As the grand circulation of the heavens, or of the MACROCOSM, is the effect of the two contrary motions of the *light* and *ſpirit*; ſo, I think, the circulation of the blood in the MICROCOSM is the effect of two contrary motions; one going from the heart along the arteries to the extreme parts of the lungs, externals, and inteſtines; the other returning through the veins into the heart. Which two motions are performed by two *different agents*, the one within, the other without the body.

The firſt is performed by the STEAM, raiſed out of the meat, drink, and juices, in the ſtomach and guts; which, as it rarifies and expands, iſſues thence, by the joint preſſure of the air or atmoſphere, and its own expanſion, from all parts of the guts, through the lacteal veſſels into the receptacle of the chyle, thence through the chyle-duct into the ſubclavian branch of the *vena cava*, and ſo forward through the right ventricle of the

Ch. VIII. heart; which being thereby dilated in its *diastole* for its reception, and immediately thereupon being contracted, jointly by * [the expansion of the Steam,] the compressure of the atmosphere, and the contraction of the muscles, in its *systole*, (the three pointed portals hindering the passage back again into the *cava*) it thence pushes into the open passage of the *vena arteriosa*, (where the sigmoidal portals hindering its return) it goes into the branches of the *arteria venosa*, and thereby into the left ventricle of the heart; which being placed as a stop or check, the force of the Steam is thereby increased, and it is again with violence pulsed forth into the *aorta* (the portals here, as before, always hindering its regress) by the branches of which artery it is carried to all parts of the body to enliven them; and to the parts which serve for secretion or discharge, where the remainder of the Steam condenses or perspires.

The second is performed by the pressure of the atmosphere, which forces the blood up the capillaries of the veins in the several parts, whence it is carried from the lesser into the greater branches of the veins, into the upper and lower parts of the *vena cava* to the place where they unite at the right ventricle of the heart, where the Steam issued into the upper part of the *vena cava* near the heart takes it to be chased the soil.

The heart, I think, uses not, nor has any great force, to push the blood forward, but is placed for a check or stop; the right ventricle, to the steam and blood issued from the *vena cava*, and the left ventricle, to the blood, and remainder of the steam, issued from the veins in the lungs. And its valves are so contrived, those from the veins to open in-

* Quere? Should not these words [the expansion of the Steam] be omitted? Or is not *expansion* a slip of the pen for *evaporation*? Editor.

ward,

ward, and those into the arteries to open outward, and shut the contrary way, that as the mixture of steam and blood presses out of the veins, it opens the valves into each ventricle, fills the ventricles, and extends them, opens the valves into the arteries, and pushes forward, whereby the force of the steam behind is spent, so that the valves from the veins shut, and the motion of the blood in the ventricles is continued forward, and the heart emptied jointly by the compression of the atmosphere, the expansion of the steam, and the contraction of its muscles, and so successively a kind of space or vacuum is made in each ventricle, at once for the blood to flow from the veins, and the steam from the guts. Ch. VIII.

These things being thoroughly weighed, and well understood, the two symptoms which remain to be spoken to, do open themselves into the same doctrine without any more ado. By the *pitcher* therefore we must understand the true and proper conceptacle of the blood, namely, the veins, which, throughout the whole body, serve only as a vessel, to contain that noble liquor, and carry it back again to the fountain. The original word כד, signifies sometimes more generally any containing vessel, and so is taken for the widow's barrel, in which was the meal, 1 Kings xvii. 14. but more especially that which is called a *pitcher*, and so more frequently it is used, Gen. xxiv. 6. Judg. vii. 1. This word both the Greeks and Latins take unto themselves, only varying the termination as is most proper to each language, and that in the very same signification. Now the proper containing vessel for the blood is the veins; there the blood is, as I may say, at home, in its own place: While it is in the heart, it is preparing, enlivening, and ennobling: while it is in the lungs, and all the other parenchymous parts

Ch. VIII. parts of the bowels, it is depurating and cleansing; while it is in the arteries, it is by force journeying; while it is in the porosities of the fleshy parts, it is communicating life, and nourishing; but while it is in the veins, it is only consulting its own good, and tending, in its own natural course, to its proper center; as milk is in the breasts, and marrow in the bones, so is blood in the *veins*, and therefore *these* are the *pitcher* here intended.

This *Pitcher* also has its *Ear*, which is usually called *auricula cordis*, which (notwithstanding its name, as if it most properly appertained belonged to the heart) yet we must know does rather belong to the *vein*, and is indeed a part thereof; and not only a part, but the principal and primary part thereof, from whence all other parts and branches do arise, as from their original, and whereunto all the blood of the body, by the compressure of the circumambient air, naturally tends, as to its ultimate hold; and whencefrom it will by no means depart but by force: and therefore this head-spring of the veins being dilated by the continual afflux of blood, brought by the force of the steam, which impels it, is contracted by the outward air, and so forces out a due proportion of blood into the *fountain*, whereunto it is annexed.

Now, the *fountain* can be no other than the right ventricle of the heart; for this is yet more strictly the *fountain of life*, and forge of the steam, to prepare it for its office of what they call *animal spirits*; and it doth sensibly live before, and die after the other parts, even of the heart itself. Moreover, here it is that the matter of our nourishment receives its first enlivening; for our food being received from the stomach and guts into the common passage of the chyle, is thencefrom carried

ed by the ſteam directly into the ſubclavian branch of the *vena cava*, where being mixed with blood, it yet remains lifeleſs and heartleſs, till being carried along that vein, it is at laſt brought into the right ventricle of the heart, wherein the heat, motion, and ferment, ſet the active principles, that is, the ſmall fine parts of the ſteam, at perfect freedom, and ſo inſtantly endow it with plenty both of life and ſpirits. This part therefore, which at the firſt gives life to that which enlivens the whole man, and does, as often as it returns thither, impregnate it anew with the ſame, muſt needs be the fountain here intended. And to this the original word מבוע gives an extraordinary clearneſs; implying, not only the *ſignum*, but the *ſignatum*, not the *hieroglyphic* only, but the part thereby decyphered: ſignifying in the firſt place, *fons*, a *fountain*, and ſecondarily *ſcatarigo venarum*, the ſpring or original from whence the veins ariſe *. Ch. VIII.

As long, therefore, as Man remains in perfect health and ſtrength, theſe veſſels are inceſſantly and carefully performing all thoſe offices unto which they are appointed: But this natural courſe does not continue for ever; for the *pitcher* is but an earthen veſſel, and does not ſo often go to the *fountain*, but at laſt it comes broken home. This breaking of the *pitcher* here, (which is the ſymptom of old age, juſt upon the point of death,) is the failing of the veins, their ceaſing from their natural action and uſe, when they can no longer carry

* So *Plato* in *Timæo*, cited by *Longinus de Sublimitate*, Sect. xxxii. calls *the heart*, αναμμα των φλεβων ἡ πηγη τ ΠΕΡΙΦΕΡΟΜΕΝΟΥ σφοδρως αἱματος, the conjunction or ſource of the veins, and the fountain of the briſkly *circulating* blood.—— Is not this one of the *many* truths which *Plato* learnt from the *Jews* in *Egypt*? Obſerve that πηγη is the very word the LXX uſe for מבוע. *Editor.*

back,

Ch. VIII. back, nor conveniently pass into the heart that liquor which they properly contain. That little blood which remains in the cold body of Man near his end, (the force of the *steam* being well nigh spent) is soon coagulated, and stagnating in the veins, the motion and circulation thereof is hindered, and so it becomes thick, like pith of elder; and because it cannot return to the *fountain* for a redintegration of it's life and spirit, it dieth in the veins, and so all the extreme parts of the body become spiritless and cold; which is the Symptom here intended: According to that often repeated maxim of *Hippocrates* ψύξις ἀκρωτηρίων θανάσιμον, the coldness of the extremities is the sure prognostic of death.

FOURTH SYMPTOM.

The Fourth and Last Symptom *is the* Wheel broken *at the* Cistern.

THE blood (as before observed) by the pressure of the air seems naturally as it were of its own accord to tend in the veins unto the heart; but it returns not from the heart, into the parts of the body but by force. Thus all the rivers in the land, by the common pressure of the air, ebb into the Sea, but they flow not from thence any further, than the violence and impulse of the Sea (caused, I think, by the *action* and *steam* of the fermentation of the *great abyss*) extends. The Blood, being once forced from the heart, by the impulse of the *steam*, is presently received into the trunk of the *great artery*, called the *Aorta*, and by the branches thereof is carried to all parts of the body. This therefore being the chief and principal instrument of rotation, or *circulation of the blood*,

is

is moſt aptly intimated unto us by a *wheel*. For what is a *wheel*, but an inſtrument of circulation? and of what can a *wheel* be an Hieroglyphic, but of ſomething that goes or makes the round? What this grand circulation is, and how performed, hath been already explained; and thoſe veſſels that are inward bound, which bring home the noble Traveller, the encompaſſer of the little world, were deſcribed in the explication of the foregoing Symbol; but thoſe which are outward bound, which carry him forth with all his wealth and ſubſtance, to accompliſh his intended end, are here intimated unto us by a *wheel*. That the great Artery, with all its branches, is here principally pointed at, has already been ſaid, and may be further confirmed: Firſt, in that it anſwers ſo directly to the *veins* ſignified in the laſt Symptom by the *pitcher*. Secondly, in that it is to us the moſt apparent *pulſor*: We can feel the blood to be forced along its cavity, in the wriſts, the temples, and divers other parts of the body. Laſtly, in that it is ſo appoſitely placed at the cock of the *ciſtern*, as will be ſhewn hereafter. Yet we muſt not ſo limit this *wheel* to the Arteries, as to exclude the very ſubſtance and parenchymous part of the *heart* itſelf, much leſs the STEAM, which is the *primum mobile*, the grand *gilgal* גלגל in the human frame; as *ſteam* in the ſteam-engine is *that* which works the whole engine. Indeed it may be ſaid of the *ſteam*, that by its intermediate parts going to, and coming from, it acts upon the whole animal Œconomy; and that the matter which compoſes it, is continually changing, or changed; yet neither of theſe will hinder the diſtinction. For upon whatever inſtruments the *ſteam* is exerciſing itſelf, they are all here intended by the *wheel*, which performs this work that is of ſo publick a concern to the whole. The *ciſtern*, from whence

this *wheel* forces that liquor, which afterwards it conveyeth throughout all the parts, is the *left ventricle* of the heart, for thereunto it is, that the *great artery* is annexed, and from thence it does ariſe. And by the check which this *ventricle* gives the blood and ſteam, iſſued from the veins in the lungs, the force of the ſteam is encreaſed, the ſuperfluous ſteam is made to ſecrete out of the lungs, and the motion of the blood is regulated to the quantity which the cavity of this *ventricle* contains at each puſh. A *ciſtern* is a veſſel made on purpoſe to receive a due proportion of water, and to retain it till the time of uſe, and then conveniently to paſs it into thoſe veſſels that are appointed to receive it from thence. And thus the *left ventricle* of the heart does in its dilation by the ſteam, (called its *diaſtole*) receive that blood which is brought unto it by the *arteria venoſa* of the lungs, and having retained it a little, it doth in its contraction, or ſyſtole, conveniently paſs a due proportion thereof into the *aorta*, to be diſpenſed as was ſpoken before: And this is the true uſe of the *left ventricle*. For the blood being ennobled, and enlivened in the *right ventricle*, and refrigerated and cleanſed, from its fuliginous vapours, in the lungs; it is now in all things accompliſhed for its ultimate uſe, and remains only to be ſent into thoſe ſeveral parts it is to quicken, which it cannot conveniently be, unleſs it be firſt received into this *ciſtern*, and afterwards be diſpoſed of by the *ſteam*, &c. to that appointed end: And we cannot but here again mention, thoſe portals that are placed, both at the entrance into, and paſſage from, the veſſel we are now ſpeaking of, (*viz.*) the *valvulæ-tricuſpides* and *ſigmoideæ*, which, as the cocks of the *ciſtern*, to let in and let out, by their opening or ſhutting give convenient paſſage, or abſolute ſtoppage to

that

that liquor, which continually runs that way. When it is ſaid that the heart is only a check or ſtop to the *ſteam* and blood; this will not deprive the two *ventricles* of the uſes aſſigned them; nor will it leſſen, but rather add to the propriety of their being here called the *Fountain* and the *Ciſtern*. For what are a *fountain* and a *ciſtern*, but a check or ſtop to the fluids, (as well as a reſervoir) by which it may more conveniently be conveyed to its reſpective uſes? and if we give the full force to the prepoſition אל uſed here, which is irradiating *to*, *from*, and *every way*; the wheel *at* the ciſtern [הגלגל אל הבור] will aptly anſwer to the *ſteam* circulating, and giving circulation every way. The *ſymptom* of Old Age, at the time of death, which is here ſignified to us by the wheel broken at the *ciſtern*, can only be underſtood to be, the ceaſing of the pulſe, and ſo the man immediately ceaſeth living: For the *ſteam*, the chief inſtrument of pulſation, decays, and can no longer perform that work which muſt neceſſarily be continued for the preſervation of life. And thus the wheel, upon which our life is turned, being taken off, we muſt needs drive heavily. The old man's pulſe does yearly and daily decline, both in reſpect of the mover, the ſtroke and the interval; and conſequently beat more languidly, ſlower and ſeldomer than before, *Pulſus rarus tardus*, *languidus & nonnunquam intermittens*, is the true pulſe of the old man, all the while he is in that condition, and is like unto the tolling of a paſſing-bell, which may put him and all his friends in mind, that he is ſhortly going the way of all fleſh; but an *Aſphyxia*, or utter abolition of the pulſe, which is the ſymptom here mentioned, is like the ſtriking of the paſſing-bell, or rather the ringing out of the knell, which

gives notice unto all that he is gone; and may ſerve as a loud and diſtinct invitation to the funeral: And then, as in the following verſe "ſhall "the duſt return to the earth as it was, and the "ſpirit ſhall return unto the Aleim who gave "it."

From hence, it appears that the doctrine, which is now called *Harvéan*, was at firſt *Solomonian*; tho' it pleaſed the Lord that this knowledge ſhould, as far as we know, lie buried for the ſpace of 2500 years, till it was retrieved by the renowned Doctor *William Harvey*. What wonder then, the diſcoveries our author, the renowned Mr. *Hutchinſon* has lately made, ſhould like that, lie buried in the rubbiſh of tranſlations and comments, *&c.* for near 1700 years, till it pleaſed God, for the intereſt, and honour of Chriſtianity, to raiſe up him to ἐρευνᾶν, *ſearch* the Scriptures, *and dig in them*, ſo as to recover this hidden Treaſure.

I would gladly, adds the pious and learned Dr. *Smith*, have what is here ſet down in this and the foregoing verſes, to be compared with any, or all of thoſe ſyſtems of the diſeaſes of age, which have been given us by *Hippocrates*, *Galen*, or any of their followers; by *David de Pomis* the Jew, *Franc. Fygerolæus*, or *Franc. Ranchinus*, or any other Heathen or Chriſtian, that have antiently or modernly treated of this ſubject; and let Preference be given to the moſt Worthy. I would fain have the crown to be put upon the head of the King *(Solomon)* his wiſdom only, among all the reſt being pure, and from above; which that it may be, I would in no wiſe have the Comment delivered by us, but the Text delivered by *Solomon* to enter the liſt of compare.

AN

A N

I N D E X

OF THE

HEBREW WORDS, &c.

Explained in this Volume.

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